

From: 73476 Pak, Michael
 Sent: Friday, February 18, 2005 12:24 AM
 To: STIC-Biotech/ChemLib
 Subject: 09/673,133 sequence search

Sequence search - 2 month amendment.
 App. #: 09/673,133

Result format: Paper.

Title: transferrin binding protein moraxella.

Please search:

Search commercial and interference databases.

SEQ ID NO: 2, 4, and 6 (all protein)

Top 40 hits.

Thanks,

2 - 00 - 706

Mike

4 - 1 - 712

6 - 00 - 713

Michael Pak
 Art Unit 1646
 Office: Remsen 4E75
 Mailbox: Remsen 4C70
 571-272-0879

 STAFF USE ONLY

Searcher: _____
 Searcher Phone: 2- _____
 Date Searcher Picked up: _____
 Date Completed: _____
 Searcher Prep/Rev. Time: _____
 Online Time: _____

 Type of Search

NA Sequence: # _____
 AA Sequence :# _____
 Structure: # _____
 Bibliographic: _____
 Litigation: _____
 Patent Family: _____
 Other: _____

 Vendors and cost where applicable

STN: _____
 DIALOG: _____
 QUESTEL/ORBIT: _____
 LEXIS/NEXIS: _____
 SEQUENCE SYSTEM: _____
 WWW/Internet: _____
 Other(Specify): _____

Date completed:

Searcher: Beverly e 2528

Terminal time: _____

Elapsed time: _____

CPU time: _____

Total time: _____

Number of Searches: _____

Number of Databases: _____

Search Site

____ STIC

____ CM-1

____ Pre-S

Type of Search

____ N.A. Sequence

____ A.A. Sequence

____ Structure

____ Bibliographic

Vendors

____ IG

____ STN

____ Dialog

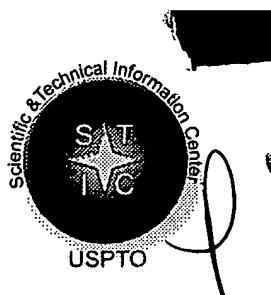
____ APS

____ Geninfo

____ SDC

____ DARC/Questel

____ Other CGN



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 145514

To: Michael Pak
Location: rem/4e75/4c70
Art Unit: 1646
Thursday, February 24, 2005
Case Serial Number: 09/673133

From: Beverly Shears
Location: Remsen Bldg.
RM 1A54
Phone: 571-272-2528
beverly.shears@uspto.gov

Search Notes

Protein Sequence Searches – February 2005

All of the sequence databases on ABSS have recently been updated.

- Please note that the curators of the UniProt database have purged some temporary accession numbers from the most recent version of UniProt. These sequences have been assigned new permanent accession numbers. The new UniProt record may not contain the previous temporary accession number.
- If you encounter an accession number from an older search run against UniProt (results file extension **.rup**) that can no longer be found in the database, the permanent record with the new accession number can be found by searching the old accession number in the UniProt Protein Archive database (**uniPARC**) at:

<http://www.pir.uniprot.org/database/archive.shtml>

If you have any questions regarding this information or your results, please contact any STIC searcher.

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Result	No.	Score	Query	Match	Length	DB	ID	Description
1	3715	100.0		713	4	US-09-059-514-53	Sequence 53, Appli	
2	2718.5	73.2		707	2	US-08-949-941B-2	Sequence 2, Appli	
3	2315	62.3		709	4	US-08-778-570B-15.	Sequence 15, Appli	
4	2246.5	60.5		706	4	US-09-059-514-15	Sequence 15, Appli	
5	62.3	60.3		703	4	US-08-613-009A-9	Sequence 9, Appli	
6	2241.5	60.3		702	4	US-08-778-570B-11	Sequence 11, Appli	
7	2241.5	60.3		702	4	US-09-059-584-11	Sequence 11, Appli	
8	2241.5	57.7		682	4	US-08-778-570B-12	Sequence 12, Appli	
9	2337.5	60.2		702	2	US-08-667-941-20	Sequence 25, Appli	
10	2337.5	60.2		702	3	US-09-074-658-25	Sequence 25, Appli	
11	2218	59.7		689	4	US-08-778-570B-16	Sequence 16, Appli	
12	2218	59.7		689	4	US-09-059-514-16	Sequence 16, Appli	
13	2144.5	57.7		682	3	US-08-513-009A-10	Sequence 10, Appli	
14	2144.5	57.7		682	4	US-08-778-570B-12	Sequence 12, Appli	
15	2144.5	57.7		682	4	US-09-059-584-12	Sequence 12, Appli	
16	2140	57.6		713	4	US-09-059-514-49	Sequence 49, Appli	
17	1929	51.9		712	4	US-09-059-584-51	Sequence 51, Appli	
18	1599	43.0		416	4	US-09-540-236-238	Sequence 238, Appli	
19	845.5	22.8		601	3	US-08-513-009A-20	Sequence 20, Appli	
20	845.5	22.8		601	4	US-08-778-570B-26	Sequence 26, Appli	
21	845.5	22.8		601	4	US-09-059-514-26	Sequence 26, Appli	
22	841.5	22.7		599	3	US-08-448-114-2	Sequence 2, Appli	
23	841.5	22.7		599	3	US-08-867-921-2	Sequence 2, Appli	
24	834	22.4		598	1	US-08-487-850A-97	Sequence 97, Appli	
25	834	22.4		598	2	US-08-178-335-97	Sequence 97, Appli	
26	834	22.4		598	2	US-08-337-183-97	Sequence 97, Appli	
27	834	22.4		598	2	US-08-478-435-100	Sequence 100, App	

Best Local Similarity 100.0%; Pred. No. 1.9e-245; Matches 713; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OPERATING SYSTEM: Windows 95
SOFTWARE: Wordperfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/949,941B
FILING DATE: 14 October 1997
ATTORNEY/AGENT INFORMATION:
NAME: Nelson, M. Bud
REGISTRATION NUMBER: 35,300
REFERENCE/DOCKET NUMBER: 11520.00
TELECOMMUNICATION INFORMATION:
TELEPHONE: (716) 856-4000
TELEFAX: (716) 849-0349
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 11520 residues
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE:
DESCRIPTION: protein
HYPOTHETICAL: yes
US-08-949-941B-2

Query Match Score 2718.5; DB 2; Length 707;
Best Local Similarity 74.2%; Pred. No. 2e-177; Mismatches 93; Indels 45; Gaps 12;
Matches 543; Conservative 51; MisMatches 93; Indels 45; Gaps 12;

Query 1 MKHIPITLCKVAISAVLTTAGGSGSNNPAPTPIPNAGSAGAGGTGTTGGTGSTDDNG 60
Db 1 MKHIPITLCKVAISAVLTTAGGSGSNNPAPTPIPNAGSAGAGGTGTTGGTGSTDDNG 60
Query 61 NAGGANSGTGNAGNSNAGSNTGSANTPEPKYQDPTDNEKEQVSSIEPAMGYAMEIK 120
Db 61 NAGGANSGTGNAGNSNAGSNTGSANTPEPKYQDPTDNEKEQVSSIEPAMGYAMEIK 120
Query 121 LRNAHPFLPNPKNAEAKRIALDQDOLVAVEGDLTNPFDKLNIEYLKKSSEVSKFEAK 180
Db 121 LRNAHPFLPNPKNAEAKRIALDQDOLVAVEGDLTNPFDKLNIEYLKKSSEVSKFEAK 180
Query 181 GGIENTRLTHKDLSSEQKEAKVKEALDVALTOFQEKYKELIENAHDKCSDAENRDLEY 240
Db 181 GGIENTRLTHKDLSSEQKEAKVKEALDVALTOFQEKYKELIENAHDKCSDAENRDLEY 240
Query 241 VKSGFNYLSGYTADHDKTNRYGTYGALYKGSSTAKELPOTSAKYKGWDEMIDTAD 300
Db 241 VKSGFNYLSGYTADHDKTNRYGTYGALYKGSSTAKELPOTSAKYKGWDEMIDTAD 300
Query 301 NKYDLPGLQAROTQWLSVSTDYEATLTLTKNNKESDYNAYGHSEFVNFADKKIRSK 360
Db 301 NKYDLPGLQAROTQWLSVSTDYEATLTLTKNNKESDYNAYGHSEFVNFADKKIRSK 360
Query 361 LINSNOLSGTAVTAKERYKIAIDHGENRFRSATSADKAESKTOHPFTSDATNKLLEGGY 420
Db 361 LINSNOLSGTAVTAKERYKIAIDHGENRFRSATSADKAESKTOHPFTSDATNKLLEGGY 420
Query 421 GPKGEELAKPLTDNDKLFGVFGAERDKVKEKTEAIDDAYALGTNTNKATTFPPTKQ 480
Db 421 GPKGEELAKPLTDNDKLFGVFGAERDKVKEKTEAIDDAYALGTNTNKATTFPPTKQ 480
Query 481 LDNFGNAKLVLGSTVNLVSTDATKNEFTKFTKDPKTSATNKAGETLMVNDDEVTKY 540
Db 481 LDNFGNAKLVLGSTVNLVSTDATKNEFTKFTKDPKTSATNKAGETLMVNDDEVTKY 540
Query 541 GKNFETLKFGFLSGVSDSHSYFLQGERTATGKEKAVPTTGKAKYLGNNWYITGAGTGRKF 600
Db 541 GKNFETLKFGFLSGVSDSHSYFLQGERTATGKEKAVPTTGKAKYLGNNWYITGAGTGRKF 600
Query 601 NEAQDIADEDFDEFEKSVKGKLTIGRTDPPVNIKEIAGNGWTCKASTTKADGGYKD 660
Db 601 NEAQDIADEDFDEFEKSVKGKLTIGRTDPPVNIKEIAGNGWTCKASTTKADGGYKD 660
Query 661 SSSTGKSVIENAEVTGGFTGPNANEMGGSPTHDDSSKASVVFDTKQOEVK 713
Db 661 SSSTGKSVIENAEVTGGFTGPNANEMGGSPTHDDSSKASVVFDTKQOEVK 713
Query 713 SSSTGKSVIENAEVTGGFTGPNANEMGGSPTHDDSSKASVVFDTKQOEVK 713

RESULT 2
US-08-949-941B-2
Sequence 2, Application US/08949941B
Patent No. 5972657
GENERAL INFORMATION:
APPLICANT: Murphy, Timothy F.
TITLE OF INVENTION: Gene Encoding Outer Membrane
TITLE OF INVENTION: Protein B1 of *Moraxella catarrhalis*
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSSEE: Hodgson, Russ, Andrews, Woods & Goodyear
STREET: 1800 One M&T Plaza
CITY: Buffalo
STATE: New York
COUNTRY: United States
ZI: 14203-2391
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.5 inch, 1.44 Kb storage
COMPUTER: IBM Compatible

TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 15:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 709 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear

US-09-059-584-15

Query Match 62.3%; Score 2315; DB 4; Length 709;
 Best Local Similarity 65.3%; Pred. No. 7.2e-150;
 Matches 480; Conservative 77; Mi-matches 130; Indels 48; Gaps 15;

Query	Subject	Score	DB	Length
1	MKHPITPLTLCVAAISAVLTLTACGG-SGGSNPPAPTPPNAGSGAGAGTGTGNTGGTGS-TDNV	59	Db	1
1	MKHPITPLTLCVAAISAVLTLTACGG-SGGSNPPAPTPPNAGSGAGAGTGTGNTGGTGS-TDNV	59	Db	1
60	GNAGCAGSNTGTAGAGSGNANSCTGSANTPPEPKYQDVTPTDKNKEQVQSSISOPBAMGYAMEL	119	Qy	1
55	--GGAGCAGNAGTGGAGSGASATPPEPKYQDVTPTDKNKEAEGSGIQEPMAGYGVEL	111	Db	1
120	KLRVAAHPHLNPKNQKEAEKTLALDQDQLVAVEGDLTNPFFDQLNLYLKKSSSEVVSKEAQ	179	Qy	1
112	KLRWTP-----QEQQEHAKINTNDVKELEKDLKHNPFDNSIWNKRSKEVQTVYNE	165	Db	1
180	KGGIEN-----NTRLTHDLSSEQEAKYKEALDNLALTOFAQEKYKELIENAHDKKSDAR	234	Qy	1
166	KQNTBDQIKRENNKQRPDKKLDDVLAQAYTEKVLDDRLTEAKPTIENKTYSHDQNKAR	225	Db	1
235	NRDLEYVKSGENYLSGTYATDHDKCKNRYGYYGALLYKGSGETAKELPQTSAKYKGWDFM	294	Qy	1
226	TRDLKVRSGYIYRGY-SNIIPKKIAKTFGDFGALFYQGTQATKOLPVSKYKGWDFM	284	Db	1
295	TDATDLNKYTDLPGTAROTQWR-SLVSSTDYATLTDKNNPKPSDNYGACHSSEEDVNFA	353	Qy	1
285	TDARKQSFQSFSGTSQRLLAGDRYSAMSYHYPSSLTDEKPKDNTGEYGHSSSETVDFS	344	Db	1
354	DKKIKGKLISNQLSG--TAVTAKERYKIEADIHGMRFRGSATASDKAEDSKTQHQPFTSDA	411	Qy	1
345	KKSLKGELSSNTIQDHHKGSYNTKTKRYDIDANIYGRFRGSATASDTEASKSKHPTSDA	404	Db	1
412	TNKLEGGFYSPKGEEQAGPKLTDNNRLFGVYGAERKDK--YVKETAELDAYALGTN--N	466	Qy	1
405	KNSLEGGFYSPQNAEELAGKELTNDNLFGVYGAERSEAKETEALDAYALGTNPKGT	464	Db	1
467	TNKATTFTPTKQKLDNFNAKKLVGISTVNLVSTDTAK--NEPTPKFVKDKPSTSATNK	524	Qy	1
465	TNPNA--FTANSKKELDNFNAKKLVGISTVNLVSTDTAK--KEPKSATNK	517	Db	1
525	AGETIMMNDDEVIKT--YGRNFYEVLKFGELSGVGDHSVFLQGERPATTGKAVPTGKAK	582	Qy	1
518	AGETIMMNDDEVIKT--YGRNFYEVLKFGELSGVGDHSVFLQGERPATTGKAVPTGKAK	574	Db	1
583	YLGWVGYI---TGAGTGTGKSFNEAQDIAFDIDFERSYRKGLTTQGRTPDVFNTKGEI	638	Qy	1
575	YLGWVGYI---TGAGTGTGKSFNEAQDIAFDIDFERSYRKGLTTQGRDPVFNITQGI	634	Db	1
639	AGNGWTGKASTTKADGGYKIDSSSSGKSVTENIAEVTGCFYGPNAENMCGSFHTDDS	698	Qy	1
635	AGNGWTGKASTTKADGGYKIDSSSSGKSVTENIAEVTGCFYGPNAENMCGSFHTDDS	694	Db	1
699	KASVVFTRQEQVK	713	Qy	1
695	KASVVFTRQEQVK	709	Db	1

RESULT 5
 Sequence 46, Application US/09059584
 Patent No. 6,440,070
 Publication No. 2002-01-11
 337 DYNAGA/GHSSESDVNFADKKKGKLSNOLSSGTA--VTAKEEYKIEADIGHG
 279 ELP-OTSAKYKGWDFMTD-ATLDNKYTDLPGTAROTQWRSLVSTDTEATL
 267 ELPTQDAVKYKGHWDFMTDVAKQRFSEVNLQAGRYYGAASSKDEYNRL
 337 DYNAGA/GHSSESDVNFADKKKGKLSNOLSSGTA--VTAKEEYKIEADIGHG
 279 ELP-OTSAKYKGWDFMTD-ATLDNKYTDLPGTAROTQWRSLVSTDTEATL
 267 ELPTQDAVKYKGHWDFMTDVAKQRFSEVNLQAGRYYGAASSKDEYNRL

Best Local Similarity 64.9%; Pred. No. 7.5e-145;
Matches 477; Conservative 70; Mismatches 133; Indels 55; Gaps 21;

327 RYNGEYHSSSEFTVNPKDKKLTGELFSNLQDSRKGNVTKRYD1DANIYGNRFRGSATA 386
Qy 395 SDAEDSKTOHPFTSDATNKLLEGFFYGPKGFBELACKFLTDNKLFGVAKRDKV- -EKT 452
Qy 387 SDAEASAKTKEPFTSDAKNSLEGFFGPNAEBLACKFLTDNKLFGVFAKRESKAGEKT 446
Db 387 EAILDAYALGTPNNTKATTFTPFKQKQDNGNAKKLWIGSTVNLVSTDATKNEFTKK 512
Qy 453 EAILDAYALGTPNNTKATTFTPFKQKQDNGNAKKLWIGSTVNLVSTDATKNEFTKK 512
Db 447 EAILDAYALGTPNFK-NNATATTTPFKQKQDNGNAKKLWIGSTVNLVSTDATKNEFTKK 503
Qy 513 FTKDKEPTSATNTRAGETLVMNDBEVTKT- -YGRNFETYLKGELSVSDSHSVFLOGERTATT 570
Db 504 FTKNKEPDATNKGATLVMNDKVSUTKTYGGRNFETYLKGELSVTSNSVFLQGERTATT 563
Qy 571 GEKAPVTTGKAKYLGNWGYITGAAGTGSKPSNEAQDADFDIFERKSVKLUTQGRDTP 630
Db 564 GEKAPVTKTAKYLGNWGYITGKDSKPSNEAQDADFDIFERKSVKLUTQGRDTP 623
Qy 631 VENIKEIAGNGWTGKASTTKADAGSYKIDSSTSSTGKSVIENAEVTGGFTGPNANEMGGS 690
Db 624 VENITGDIAGNGWTGKASTTKADAGSYKIDSSTSSTGKSVIKAETVGGFTGPNANEMGGS 683
Qy 691 FTHDTSKASAVVFGTKRQQEVK 713
Db 684 FTHNTDSKASAVVFGTKRQQEVK 706

RESULT 6
US-09-613-009A-9
Sequence 9, Application US/08613009A
Patent No. 6090576

GENERAL INFORMATION:
APPLICANT: Myers, Lisa E.
APPLICANT: Schryvers, Anthony B
APPLICANT: Harkness, Robin E
APPLICANT: Loosmore, Sheena M.
APPLICANT: Du, Run-Pan
APPLICANT: Yang, Yan-Ping
APPLICANT: Klein, Michel H
TITLE OF INVENTION: Transferrin Receptor Genes of *Moraxella*
NUMBER OF SEQUENCES: 31
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sim & McBurney
STREET: 6th Floor, 330 University Avenue
CITY: Toronto
STATE: Ontario
COUNTRY: Canada
ZIP: M5J 1R7
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/613,009A
FILING DATE: 08-MAR-1996
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Stewart, Michael I
REGISTRATION NUMBER: 24973
REFERENCE/DOCKET NUMBER: 1038-542
TELECOMMUNICATION INFORMATION:
TELEPHONE: (416) 595-1155
TELEFAX: (416) 595-1163
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 702 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear

us-09-613-009A-9
Query Match

RESULT 7
US-09-778-570B-11
Sequence 11, Application US/08778570B
Patent No. 6437096

GENERAL INFORMATION:
APPLICANT: Myers, Lisa E.
APPLICANT: Schryvers, Anthony B
APPLICANT: Harkness, Robin E
APPLICANT: Loosmore, Sheena M.
APPLICANT: Du, Run-Pan
APPLICANT: Yang, Yan-Ping
APPLICANT: Klein, Michel H
TITLE OF INVENTION: Transferrin Receptor Genes of *Moraxella*
NUMBER OF SEQUENCES: 43
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sim & McBurney
STREET: 6th Floor, 330 University Avenue

CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: MSG 1R7
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent in Release #1.0, version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/778,570B
 FILING DATE: 03-JAN-1997
 CLASSIFICATION: 536
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24973
 REFERENCE/DOCKET NUMBER: 1038-664
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 11:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 702 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-778-570B-11

Query Match 60.3%; DB 4; Length 702;
 Best Local Similarity 64.9%; Pred. No. 7.5e-145;
 Matches 477; Conservative 70; Nismatches 133; Indels 55; Gaps 21;

Db 568 YLGNWVGYITGKDTGTGKSFDTAQDVADEFDDEGNKSVSGKLITKGQDPPFSITQI 627
 Qy 639 AGNGTGTGKASTTRADAGGYKIDSSTGKSVIENAEVTCFGYGNANENGGSFTHDSS 698
 Db 628 AGNGTGTGASTTRADAGGYKIDSSTGKSVIENDVTCFGYGNANENGGSFTHADDS 687
 Qy 699 KASVVFGTKRQQEVK 713
 Db 688 KASVVFGTKRQQEVK 702

RESULT 8
 US-09-059-584-11
 / Sequence 11, Application US/09059584
 / Patent No. 6440701
 GENERAL INFORMATION:
 / APPLICANT: Myers, Lisa E
 / APPLICANT: Schryvers, Anthony B
 / APPLICANT: Harkness, Robin E
 / APPLICANT: Loosmore, Sheena M.
 / APPLICANT: Du, Run-Pan
 / APPLICANT: Yang, Yan-Ping
 / APPLICANT: Klein, Michel H
 / TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella
 / NUMBER OF SEQUENCES: 60
 / CORRESPONDENCE ADDRESS:
 / ADDRESSEE: Sim & McBurney
 / STREET: 6th Floor, 330 University Avenue
 / CITY: Toronto
 / STATE: Ontario
 / COUNTRY: Canada
 / ZIP: MSG 1R7
 COMPUTER READABLE FORM:
 / MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent In Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/059-584
 FILING DATE: 14-APR-1998
 CLASSIFICATION:
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24973
 REFERENCE/DOCKET NUMBER: 1038-194
 APPLICATION NUMBER: US 08/778,570
 FILING DATE: 03-JAN-1997
 CLASSIFICATION:
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 11:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 702 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 US-09-059-584-11

Query Match 60.3%; DB 4; Length 702;
 Best Local Similarity 64.9%; Pred. No. 7.5e-145;
 Matches 477; Conservative 70; Nismatches 133; Indels 55; Gaps 21;

Qy 1 MKHPIPLTLCVAISAVLTLTAGCGSGSNPPAATPIPNAGSAGNAGGTGNTGGTGSTNDVNG 60
 Db 1 MKHPIPLTLCVAISAVLTLTAGCGSGSNPPAATPIPNAGSAGNAGGTGNTGGTGSTNDVNG 55
 Qy 1 NAGGANSGTGNAGNSGNAGTSANTPPEKQDYVPTDNEKEQVSSICQEPAMGYAMELK 120
 Db 56 -----TANAGNTGTGNTSGTSANTPPEKQDYVPTDNEKEQVSSICQEPAMGYGMAIS 107
 Qy 121 LRNAHPLNPKNPKNAEKR -I ALDQDPLVAYEGDLTNPF ---DNKLYEYLKKSSEVVS 174
 Db 108 KINLH--NRQDTPDLEKNTLTDGKQVA-EKGKSPPLPSLVDENKLQDGYIAKNN--- 160
 Qy 175 KFEAQOKGIEENTRLTHDOLSSQEAKYKEALDNLTAQFAQ-- EKYKELIENAHDKSD 232
 Db 161 --VADKNAIGDRIGKCNKEISDEELAKQIKEAVRKs-HEFOQVUSSLSENKIFHNSDGTIK 217
 Qy 233 ARNRDLEYTKVSGFNYLS-- GYATDHDKCTNYGYYGALKYKGSSBETAKELP-QTSAKYK 288
 Db 218 ATTRDQKVDGY-YLANDGNLYTQTKDCLWNL-GPVGVFYNQGTTAELPDTOPAVRK 275
 Qy 289 GYWDFTD-ATLDNQTKYTDLPGIARQTLVSLVSTDYATLTDKQNPDSYNGAYGHSE 347
 Db 276 GHWDFTDVANRNRNFSEVKENSKQAGWYQGSSDEYNRNLTKESEADPQHSGSEGHSS 335
 Qy 348 FDVNFADKCZKGKLISN-- -QLSGTAVTAKERYKLEADTHGNRFRGSATASRAEDSKTQ 404
 Db 336 PTVNFKERKLTKGLFSNLQDHKGN-VTCTPERYDIDANHGNRFRGSATASRNKNTDSK-- 392
 Qy 405 HPFTSDATNKLEGFFGPKGEBELAKGFLFGVFGAKRDK-- VKEFALDAYLG 462
 Db 393 HPFTSDANRLEGGFPGKGBELAKGFLFGVFGAKRDKSAEKEETEAIDAYLG 452
 Qy 463 TPNNTNKAATTPPFKQKQDNGNAKKLVLGTSVNLVSDATKNEFTKPTKDPTSAT 522
 Db 453 TENTSN-ATTPFPFIEKQDNGNAKKLVLGTSVNLVSDATKNE--FTKQKPESAT 507
 Qy 523 NKAGETLMVNDBEVTKYGNFEYLKFGELSGVGDHSVFLQGERTATTGKAVPPTGKAK 582
 Db 508 NEAGETLMVNDBEVTKYGNFEYLKFGELSGVGDHSVFLQGERTATTGKAVPPTGKAK 567
 Qy 583 YLGNWVGYI ---TGAGTGTGSFNEAQDIAFDIDFERKSVKGKLTQGRRTDPVFNKGEI 638

Query Match 60.3%; DB 4; Length 702;
 Best Local Similarity 64.9%; Pred. No. 7.5e-145;
 Matches 477; Conservative 70; Nismatches 133; Indels 55; Gaps 21;

Qy 1 MKHPIPLTLCVAISAVLTLTAGCGSGSNPPAATPIPNAGSAGNAGGTGNTGGTGSTNDVNG 60
 Db 1 MKHPIPLTLCVAISAVLTLTAGCGSGSNPPAATPIPNAGSAGNAGGTGNTGGTGSTNDVNG 55
 Qy 61 NAGGANSGTGNAGNSGNAGTSANTPPEKQDYVPTDNEKEQVSSICQEPAMGYAMELK 120
 Db 56 -----TANAGNTGTGNTSGTSANTPPEKQDYVPTDNEKEQVSSICQEPAMGYGMAIS 107

121 LRNAHPINPKNPKAEBKR - IALDQKDLVAVEGDLTMIFP ---- DKNLBYLKKSEVVVS 174
 108 KINLH - NRQDTPLEDEKNTTLDGKQVA - EGGKKSPLPFSLVDENKLQDGYIAKNN---- 16.0
 175 KPEAQKGIGENINTRLTHDISSEQKBAKTPEDALDNLATQPAQ - EKYKELJENAHDKGSD 232
 161 --VADNAIGDRIGKGNKEISDEELAKQIKEAQRKS - HEFOQVLESLENKIFHNSNDGTK 217
 233 ARNRDLEYVSKSGFNLYLS - -GYTATDHDCKTNYRGVYGYALKGKGSETAKELP - QTSAYK 288
 218 ATTRDQKVDGY - YLANDGNYLTQTKDILWNL - GPVGQVEYNGTTTAKELPLTQDAVKR 275
 289 GYWDENTD - ATLDNKYTDLPGIAROTQWRLSLVSTDEYATLTLTDKRNKPSDINGAYGHSE 347
 276 GHWDENTDVAARRNRSEVENKSENQAGWYGAQSKCDEYRNRLTKEADSAPDGHSGEYGHSE 335
 348 FDVNFADKKIGKGLISN - -QLSGPTAVTAKERYKIEADTHGNRFRGSATASDRAEDSKTQ 404
 336 PTVNFKEKLGKLFNSLQDRHKGN - VTKTTERYDIDANHGNRFRGSATASDKNNTSK -- 392
 405 HPFTSDATNKLEGGFYGPKGPELACKFLTDNNKLPGVFGAKRDK - VETKTEAIDAYALG 462
 393 HPFTSDANRLEGGFYGPKGPELACKFLTDNNKLPGVFGAKRDKRESKAEETEALDAYALG 452
 463 TPNNTNKAATTPPTFKQKLDQDFGNAKKL - VLGSTVNLVSDATKNEBFTKFTDKPTSAT 522
 453 TPNNTN - ATTPPTFKQKLDQDFGNAKKL - VLGSTVNLVSDATKNEBFTKFTDKPTSAT 507
 523 NKAGETLMVNDDEVTKYGNFELYKFGFELSGVDSHVSFLQGERTATTGKAK 582
 508 NEAGETLMVNDDEVSKYGNFELYKFGFELSGVDSHVSFLQGERTATTGKAK 567
 583 YLGNNWGYI ---- TGAGTGSFSNEBAQDIADEPDKPERKSYVKGKLTTOGRDTPVFNIGEI 638
 568 YLGNNWGYI TDKDGTGKSFDTADVADEDIDFENKSYSGKLJTKGRDTPVFNIGEI 627
 639 AGNGWTKAStTAKDAGGYKIDSSSTGKSYTENIAEVGTFYGPVNAEMCGSFHDTS 698
 628 AGNGWTKAStTAKDAGGYKIDSSSTGKSYTENIAEVGTFYGPVNAEMCGSFHTNADS 687
 699 KASVVFGTKROQEVK 713
 688 KASVVFGTKROQEVK 702

RESULT 9
 US -08-867-941-25
 Sequence 25, Application US/08867941
 Patent No. 5977337
 GENERAL INFORMATION:
 APPLICANT: Loosmore, Sheena M
 APPLICANT: Du, Run-Pan
 APPLICANT: Wang, Quijun
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Klein, Michel H
 TITLE OF INVENTION: LACTOFERRIN RECEPTOR GENES OF MORAXELIA
 NUMBER OF SEQUENCES: 67
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Sim & McBurney
 STREET: 6th Floor, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: MSG 1R7
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent In Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/867,941
 FILING DATE: 03-JUN-1997
 CLASSIFICATION: 435

508 NEAGETLMVNDDEVTKYGNFELYKFGFELSGVDSHVSFLQGERTATTGKAK 567
 583 YLGNNWGYI ---- TGAGTGSFSNEAQDIADEPDKPERKSYVKGKLTTOGRDTPVFNIGEI 638
 568 YLGNNWGYI TDKDGTGKSFDTQDVAFDIDGKNSVSGKLJTKGRDTPVFNIGEI 627
 639 AGNGWTKAStTAKDAGGYKIDSSSTGKSYTENIAEVGTFYGPVNAEMCGSFHTNADS 687
 628 AGNGWTKAStTAKDAGGYKIDSSSTGKSYTENIAEVGTFYGPVNAEMCGSFHTNADS 687

Matches	Conservative	Mismatches	Indels	Gaps	15;
21	CGG-SGSSNPAPTPINAGSAGNAGCTGNTGCGTGSTDNGAGGANSCTGAGNSGNAN	79			
1	CGSSGFNPPAPTPINAGSAGNAGCTGNTGCGTGSTDNGAGGANSCTGAGNSGNAN	51			
80	SGTGSANTPEPKYQDVPDKNEKEQVSSIEQEPAMGTAMELKURNAPNPNRKEAERI	139			
52	SGAGSASPPEPKYQDVPDKNEKEQVSSIEQEPAMGTAMELKURNAPNPNRKEAERI	105			
140	ALDQDKDLYVAVEGDLTNPFDKNLIEVLUKKSSEVSKPAAQKGIIEN-----NTRLTHKDL	194			
106	KINTNDVVKRLEPDGLKINPFDNSIWQNKNSKEVQTYQNQEKNEDIKRANKORDKDL	165			
195	SSEQKEAKVKAEALDNLATQPAQEKYKELIENAHDKKSDAARNRDLLEYTKSGPNYLSBYTAT	254			
166	DYALQAYTEKVYKDLRTELAKPIYEKINTNSHDKONKARTRDLKVYRSGTYRSCE-SN	224			
255	DHDKTKTNYRGYGYGALYYKGSETAKELPQTSACKYKGWDFMTDATLONKTYDOLPGLTAROTQ	314			
225	1IPKKIAKTFGDCALFYQGTQAKQLPVSQVKYKGWDFMTDAKKCQSFFSGTSORLAG	284			
315	WR-SLVSTDEYATLTDKNNKPKSDYNGAIGHSSSEPDYNAFKDKIKGKLISNOLSG--TAV	371			
285	DYSAMSYTHEYSESSLTDBKNEKDNYEYGHSESEFTVDFSKSLKGBLSSNTQDGHKGSV	344			
372	TAKERYKTEADFHGNRPRGSATASDRAEDSKTQHPTSDATNKLKEGGYGPKGEBELAGKF	431			
345	NKTKRYDIDANIYGNRPRGSATASDTEASSKHSPFTSDAKNSLEGGYGPNAEELAGKF	404			
432	LTDNDKLFGVFGAKRDK--VKEKTEALDAYAALGTFN--NNTKNAFFTPFTKQDNEGN	486			
405	LTDNDKLFGVFGAKRDK--VKEKTEALDAYAALGTFNPKTGNPA--FTANSRKELDNEGN	462			
487	AKKLVLGCTSVINLVDSTDAK--NEFTKFKTDKDPTSATNKAGETLMNDEVIVKT--YGK	542			
463	AKKLVLGCTSVINLVDSTDAK--NEFTKFKTDKDPTSATNKAGETLMNDEVIVKT--YGK	517			
543	NPEYLKGELSYGDHSVFLQBERTATTEGKAVPTGKARYLGNWGYI----TGAGTGK	598			
518	NPEYLKGELSYGDHSVFLQBERTA--EVKAVPTEGTAKYLGNNWGYITGKDTGTSTGK	574			
599	SPNEAQDIDADFDFERKSVKRSLTTOGRTEFVNTKGEIAGNGTCKASTTKADAGGYK	658			
575	SPNEAQDIDADFDFERKSVKRSLTTOGRTEFVNTKGEIAGNGTCKASTTKADAGGYK	634			
659	IDSSSTGSKSIVENAEVTTGGYGPNAEMGGSFTHDIDSKASVWVGTKROEVK	713			
635	IDSSSTGSKSIVENAEVTTGGYGPNAEMGGSFTHDIDSKASVWVGTKROEVK	689			
RESULT 12					
-09-059-584-16					
Sequence 16, Application US/09059584					
Patent No. 6,440701					
GENERAL INFORMATION:					
APPLICANT: Myers, Lisa E					
APPLICANT: Schryvers, Anthony B					
APPLICANT: Harkness, Robin E					
APPLICANT: Loomore, Sheena M.					
APPLICANT: Du, Run-Pan					
APPLICANT: Yang, Yan-Ping					
APPLICANT: Klein, Michel H					
TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella					
NUMBER OF SEQUENCES: 60					
CORRESPONDENCE ADDRESS:					
ADDRESSEE: S.M. & McBurney					
STREET: 6th Floor, 330 University Avenue					
CITY: Toronto					
STATE: Ontario					
COUNTRY: Canada					
ZIP: M5G 1R7					
COMPUTER PRANDABLE FORM:					
599 SFNEAQDIDADFDFERKSVKRSLTTOGRTEFVNTKGEIAGNGTCKASTTKADAGGYK					
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Query Match						
	Best Local Similarity	Score	DB	Length	Indels	Gaps
;	STRANDEDNESS: single					
;	TOPOLOGY: linear					
;	US-08-778-5708-12					
Qy	Query	Match	57.7%	Score 2144.5;	DB 4;	Length 682;
;	Best Local Similarity	63.9%	Pred. No. 3e-13.8;	Missmatches 133;	Indels 55;	Gaps 21;
;	Matches 457;	Conservative				
Db	21 CGGSGGSNNPAPTPNAGSAGNAGCTGNTGGTSTDNYGNAGGANSCTGAGAGNAGNANS 80					
Db	1 CGGSGGSNNPAPTPNAGSGNTGNTGAGG---TDN-----TANAGNTGGTNS 47					
Qy	81 GTGSANTPEPKYQDPTDKNKEQVSSIEOPAMGYAMEKLKNRAPHPLAPNPKNEAKER-I 139					
Db	48 GTGSANTPEPKYQDPTERNEKDQVSSIEOPAMGYGMASKNIIH--NRQDTPLDERKII 105					
Qy	140 ALDQDVLAVEGDLTNPPIPF----DKNLIBYLKKSSEVSVSKFEAQKGGEIENNTRLTHKDL 194					
Db	106 TLDGKQVA-EGKGSPLPSLDEVERKLQDLYIARN-----VADKNAIGDRIGKGNKEI 158					
Qy	195 SSEQKEAKYKEALDNLALTQFAQ--EKYKELIENAHDKKSNDARNDLEYTKSGENYLS--- 249					
Db	159 SDEELAOKIKEAVRKS-HEEQQVNLSSLNKIPHENDGTTKATTRDLKVVDYGY-YLANDG 216					
Qy	250 GYTADHDCKTNYRGYYGALIYKGSSTAKELP-OTSAYKGYNDPMTD-ATLONKTYDLP 307					
Db	217 NYLTWKTDLWNL-GPVGGVYFNGTGTAKELPQDAVKYGHHDFTMDVANRNFSEYK 275					
Qy	308 GIAROTQWRSLVSTDEYATLTDKNNKPKSDYNGAYGHSSSEFDVNAFDKIKGKLISN--- 364					
Db	276 ENSQAGWYGAASSKDEYNRNLTKEDSAPDGHSGEXYGHSSSEFTNFKERKLTLGFLFSN1QD 335					
Qy	365 QLSGTTAVTAKERYKLEAD1HGNRERGSATASDKAEDSKTQHPPFNSDATNKLKEGGYFGPKG 424					
Db	336 RHKGN--VTKTERYDIDANTHGNGRERGSATASNKNDTSK--HPFTSDANNRLECGFYFGPKG 392					
Qy	425 EBLACKFLTDNDNLKEFGVGAKRDK--VKEPEALLDAYALGTFNNTNKRATTFTPTTKOLD 482					
Db	393 BELLAKFLTDNDNLKEFGVGAKRKESKAETEALLDAYALGTFNNTN-ATTFPTTKOLD 451					
Qy	483 NFGNAAKKLVLGSTVYINLVSTDATNEKFTKFTKDPSTSATNKAGECTLMVNDEVTKYTK 542					
Db	452 NFGNAAKKLVLGSTVYDLVPTDATNE----FTKDPESATNEAGTLMVNDEVTKYTK 507					
Qy	543 NPEVYKFGELSVGDSHSVFLQGERTATTCGKAVPTGKAKYLGWNWGYI---TGAATGTK 598					
Db	508 NPEVYKFGELSVGDSHSVFLQGERTATTCGKAVPTGKAKYLGWNWGYITGKDGTGTK 567					
Qy	599 SFNEAQDIAFDIDFIDERKSVKGKLTQGRDTPVNFNIKGRIAGNGWGRASTTRADAGGYK 658					
Db	568 SFTDSDQDADFDIDEGNKVSGKLTKGRQDPVFTSITGQIAGNGWGTASTKTRADAGGYK 627					
Qy	659 IDSSSTGKSVKSVIENAVETGCFYGNANENGGSFTHDDDSKASVYFGTKKROQEVK 713					
Db	628 IDSSSTGKSVKSVIENAVETGCFYGNANENGGSFTHADDSSKASVYFGTKKROQEVK 682					

543 NFEYLKFGELSVGDSHVFLQERTATTGEKAVPTGKAKYLGNYGYI --- TGAGTGK 598
 508 NFEYLKFGELSVGDSHVFLQERTATTGEKAVPTGKAKYLGNYGYITGKDITGK 567

Qy 599 SFNEAQDIADEPDIIFERKSVKGKLTQGRTPVNITKGELAGNGWTGKAESTTKADAGGYK 658
 Db 568 SFTDAQDVADEPDIIFGNKSVGKLTGKRDGPVFSITGGTAGNGWTGTAESTTKADAGGYK 627

Qy 659 IDSSSTGKSIYENIAEVTFGGYFPNANEPMGGSFTHDIDSKASVYVFTGKQOEVK 713
 Db 628 IDSSSTGKSIYENIAEVTFGGYFPNANEPMGGSFTHDIDSKASVYVFTGKQOEVK 682

RESULT 16
 US-09-059-584-49

Sequence 49, Application US/09059584

GENERAL INFORMATION:
 APPLICANT: Myers, Lisa E.
 APPLICANT: Schryvers, Anthony B.
 APPLICANT: Harkness, Robin E.
 APPLICANT: Loosmore, Sheena M.
 APPLICANT: Du, Run-Pan
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Klein, Michel H.
 TITLE OF INVENTION: Transferrin Receptor Genes of *Moraxella*
 NUMBER OF SEQUENCES: 60
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Sim & McBurney
 STREET: 6th Floor, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: MSG 1R7

COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/059, 584
 FILING DATE: 14-APR-1998
 CLASSIFICATION:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/778, 570
 FILING DATE: 03-JAN-1997
 CLASSIFICATION:
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I.
 REGISTRATION NUMBER: 24973
 REFERENCE/DOCKET NUMBER: 1038-794
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 49:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 713 amino acids
 TYPE: amino acid
 TOPOLOGY: linear

US-09-059-584-49

Query Match 57.6%; Score 2140; DB 4; Length 713;
 Best Local Similarity 62.4%; Pred. No. 6.5e-138;
 Matches 467; Conservative 70; N mismatches 141; Indels 70; Gaps 23;

Qy 1 MKHPIPLTLCVAISAVLTLACGGSGSNPAPTPNPGAGAGGTGTTGGTGSTDNG 60
 Db 1 MKHPIPLTLCVAISAVLTLACGGSGSNPAPTPNPGAGAGGTGTTGGTGSTDNG 55

Qy 61 NAGGANSGTGAGNSCNANSTPPEPCQDPTDKNKEOVSISIOPAMGYAMELK 120
 Db 56 -----TANAGNTGTTSGTGASSTSPKQDVPTTNPNNKEQVSSIOPMGYGMAL 107

Qy 121 LRNAH ---- PLNPKNKVAEKRNALDQDKLVAVGDLTNIPF----DKNLIEYKKSS 170
 Db 108 KINLJYDQODPLP----DKNLITLDGKQVA-DNOKSPPLPSTDVENKLDDGTAKN 160

Qy 171 EVVSKPEAQKGGIENNTLTHDLSSEQEAKVREALDNTLTOFFQ--EKYKELBNADH 228
 Db 161 EADKNAIGERIKRENE--QNKK1SDEELAKK1KENVRKS-PEFOVQLSSIKAKTFHSND 216

Qy 229 KKSDAARNRDRLEYXKGF----NYLSGYATDHDKCTNRYGYYGALYKYYGSSETAKELP- 281
 Db 217 KTRTKATTRDJKYVDGYLYNDANLT- VRTDKRKLWN-SGPYGVFTNGSTIAKELP 273

Qy 282 QTSACKGKGYDEMDT-ATLDNKYTYDPLGIAROTQRSLSVSTDEMYTLLDKNNKPSDYNG 340
 Db 274 QDAVCKYKGYHDEMTUAYKRNFRSVEKTYQAGWVYGAESSEKDNRLTKADAADPNYSG 333

Qy 341 AYGHSEBFDVNFADKIKGKLISNOLSG - TAVTAKEYKIEADLHGNEPRGSATADSKA 398
 Db 334 EYGHSEBFPTNPKKEKLTGELFSNLQDSHKQVKTJKRDIKADHGNEPRGSATADSKA 393

Qy 399 EDSKTOQHPFTSDATNKLLEGFFYGPKEELAGKFILTDDNKLFGVPAKQEGNEVKTBAILD 457
 Db 394 EDSKSKHPFTSHAKXLEGFFYGPKEELAGKFILTDDNKLFGVPAKQEGNEVKTBAILD 453

Qy 458 AYALGTFN--NTNKATTETPFTKQLDNFGNAAKVLGTLSTVINVSTDAK- -NBFTKK 512
 Db 454 AYALGTFNKEPTGTTNEA- -FTANSKEBLDNGNAAKVLGTLSTVIVDPTDKDYNBF-- 508

Qy 513 FTKDQPKTSATNKGATLMLNDEVVTKYGNFENYKLGELSVGDSHSVLOGERTATTGE 572
 Db 509 - -KEPKPSATNKGATLMLNDEVVTKYGNFENYKLGELSVGDSHSVLOGERTATTGE 566

Qy 573 KAVPTGKRYLGNWGYITGAT- - -GKSPNEAQDIAFDIDFDFERKSVKGKLTTOG 626
 Db 567 KAVPTGKRYLGNWGYITGADSSRGSITDGGKFTDAKDADFDIDFERKSVNGLTTKD 626

Qy 627 RTDPYNNIKEIAGNGWTGKASTYKADAGGYKIDSSTSSTGKSVIENAEVTGGFYGPNAE 686
 Db 627 RQDPFNITEBIAAGNGWTGKASTAANAGGYKIDSSTSSTGKSVIENAEVTGGFYGPNAE 686

Qy 687 MGGSPTHDT- -DSSKASVVEGFTKROEVK 713
 Db 687 MGGSPTHNSGNDGKVSvVFSTKK-QEVK 713

RESULT 17
 US-09-059-584-51
 Sequence 51, Application US/09059584
 Patent No. 6440701
 GENERAL INFORMATION:
 APPLICANT: Myers, Lisa E.
 APPLICANT: Schryvers, Anthony B.
 APPLICANT: Harkness, Robin E.
 APPLICANT: Loosmore, Sheena M.
 APPLICANT: Du, Run-Pan
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Klein, Michel H.
 TITLE OF INVENTION: Transferrin Receptor Genes of *Moraxella*
 NUMBER OF SEQUENCES: 60
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Sim & McBurney
 STREET: 6th Floor, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 ZIP: MSG 1R7
 COUNTRY: Canada
 ZIP: MSG 1R7
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentin Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/059, 584
 FILING DATE: 14-APR-1998
 CLASSIFICATION:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/778, 570
 FILING DATE: 03-JAN-1997
 CLASSIFICATION:
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I.
 REGISTRATION NUMBER: 24973
 REFERENCE/DOCKET NUMBER: 1038-794
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 49:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 713 amino acids
 TYPE: amino acid
 TOPOLOGY: linear

US-09-059-584-49

Query Match 57.6%; Score 2140; DB 4; Length 713;
 Best Local Similarity 62.4%; Pred. No. 6.5e-138;
 Matches 467; Conservative 70; N mismatches 141; Indels 70; Gaps 23;

Qy 1 MKHPIPLTLCVAISAVLTLACGGSGSNPAPTPNPGAGAGGTGTTGGTGSTDNG 60
 Db 1 MKHPIPLTLCVAISAVLTLACGGSGSNPAPTPNPGAGAGGTGTTGGTGSTDNG 55

Qy 61 NAGGANSGTGAGNSCNANSTPPEPCQDPTDKNKEOVSISIOPAMGYAMELK 120
 Db 56 -----TANAGNTGTTSGTGASSTSPKQDVPTTNPNNKEQVSSIOPMGYGMAL 107

FILING DATE: 14-APR-1998
 CLASSIFICATION: PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/778,570
 FILING DATE: 03-JAN-1997
 CLASSIFICATION: ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I.
 REFERENCE/DOCKET NUMBER: 1038-794
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 51:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 712 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-09-059-584-51

Query Match 51.0%; Score 1929; DB 4; Length 712;

Best Local Similarity 54.5%; Pred. No. 1.6e-123; Matches 402; Conservative 104; Mismatches 180; Indels 52; Gaps 15;

Query Db 1 MKHPLPLTLCVTAISAVLTLACCGSGSNPPAPTPIPNAGSAGNAGTGTGSTDNG 60

Db 1 MKHPLPLTLCVTAISAVLTLACCGSGSNPPAPTPIPNAGGAGNAG - STGGAGSTDN - 56

Qy 61 NAGGANSGTGNAGNSENASCTGSANTPEPKYQDYPTDKNEKEQVSSIQPAMGYAMELK 120

Db 57 -----AANAGSTGGCGGSASTQPKQDYPTDKNEKEQVSSIQPAMGYVELK 108

Qy 121 LRNAHPINPNKKEAERKIALDQKDLVAVEGDLTNPFDKRLIEVKKSSSEVSKPEAK 180

Db 109 LRNWIP-----QEQEHAKINTNDVVKLSEDLKINPFDNSIWONIKNSKEVOTYNOEK 162

Qy 181 GGIENNTRLTHKDLSSSEQKEAKRKEAIDNALTQFAOEKYKELIENAHDKSDARNRDLLEY 240

Db 163 QNTEROIKRKENELDTALKALIETKLDLTSLAKPIYENINSHDNRKNTTRDLKY 222

Qy 241 VKSGENYLSGYATDHDKTMNYRGYALYKGSETAKELPOTSAKYKGYWDMDTDL 300

Db 223 VRSQTYLRSQNSNIDQKCIARTGFCQALFYKGTQTAQKLPVSEYVCKGTWMDTDAKG 282

Qy 301 NKYTDPGIAQOTQWSLVSDEYATLTLDEQNKKSDYNGAIGHSEFDNPAFKIGK 360

Db 283 QSFSSFEP-----RRAQDRYRSMSSHEPSLTDKKNPKDNYNDEYGHSSSEFTDPSKSLSLGG 340

Qy 361 LISN--OLSGTAVTAKERKIEADTGHNRFRGSATASDKAEDSKTQHPTSDATNKLEG 418

Db 341 LFSNLQDHKGKVTKRYDINARHGNRFRGSATAINRNEKACHPTSDADRLEG 400

Qy 419 FYGPKGEELAKGFLTDNNKLFQFGVFKAKRDK- KVEKTEAIDDAYALGTFEN -- NTNKATTI 474

Db 401 FYGPNAAELAKGFLTDNNKLFQFGVFKAKQESAKETEAIIDAYALGTFNKGTTNPA- FT 458

Qy 475 PPTKKQDLDNGRACKLKVLSGTVNLYSTDATKNEFKTFKDKPSTSATNKAGEFLMVNE 534

Db 459 ANSKKELDNEFGNINKLVLGSGTVDLTQ-----GNDPVKTKDKEKPATNTQAGEPTVNDK 514

Qy 535 VIVKTYGRNFYELKFGBLSVEDSHSYFLQGERTATG- -EKAVPTGKAKYLGNNVGYLT 592

Db 515 VRVQVCCSNLHLKFGSSL1GDSNPLQGERTATGKGDAMPYAGNARYGWTWAGYA 574

Qy 593 GAGTCKSPNEQDIAD----FDIDPERKSVKGKLTQGRTD- -PVNFKGEIAGNNT 644

Db 575 GSGNTSKAYEAQQFANAQNRAEEFDVFLKJLIPNTSSDGKSAFDITATDNGRS 634

Qy 645 GRASITKAADGYYKIDS--SSTGKSVTENAEVTFGGYGPNAENGGSFTHDTD----- 696

Db 635 GKANTPDIETGKIDSNSBSGR- VIVKDAIVGGFYGPOANEELGGSTYKSNDAQND 693

Query Db 697 -DSKASVVFGTICKROEVK 713
 694 KDSSASVVFGARKQEVK 711RESULT 18
 US-09-540-236-2388

; Sequence 2388, Application US/09540236

; Patent No. 6673910

; GENERAL INFORMATION:

; APPLICANT: Gary L. Breton et al.

; TITLE OF INVENTION: NUCLEAR ACID AND AMINO ACID SEQUENCES RELATING TO MORAXELLA CATA

; TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS

; FILE REFERENCE: 2709-2005-001

; CURRENT APPLICATION NUMBER: US/09/540,236

; CURRENT FILING DATE: 2000-04-04

; NUMBER OF SEQ ID NOS: 3840

; SEQ ID NO 2388

; LENGTH: 416

; TYPE: PRT

; ORGANISM: M. catarrhalis

; US-09-540-236-2388

Query Match 43.0%; Score 1599; DB 4; Length 416;

Best Local Similarity 77.8%; Pred. No. 2.8e-101; Matches 322; Conservative 32; Mismatches 42; Indels 18; Gaps 8;

Query Db 311 RQTO-----WRSLSVSTDATLTLTKNNKESDYNAGYGSSEFDNPAFKKIGKLISNQ 365

Db 9 RQTNPMGVVWFLMSMQHSC-- -QKIPKPSNNYNGAHSSEFDVNFAKKVTKGKLISNQ 65

Query Db 366 LSGTAVTAKERKIEADTGHNRFRGSATASDKAEDSKTQHPTSDATNKLEGFFGPKGE 425

Db 66 LSGTAVTAKERKIEADTGHNRFRGSATASDKAEDSKTQHPTSDATNKLEGFFGPKGE 125

Query Db 426 ELAGKFLTDNNKLFQGVFGAKRD- KVEKTRAILDAYALGTFENNTNKATTETPFTKQLDNF 484

Db 126 ELAGKFLTDNNKLFQGVFGAKRQEAKRPTSDATNKLEGFFGPKGE 184

Query Db 485 GNAKVLVLSGTVNIVSTDATRNEFTKFKDKPSTSATNKAGEFLMVNEDEVTKYGRNF 544

Db 185 GNAKVLVLSGTVNIVSTDATRNEFTKFKDKPSTSATNKAGEFLMVNDKVSVKYGRNF 242

Query Db 545 EYLKGELSYGDSSHVSFLQGERTATGEKAQPTGKAKYLGNNVGYI- -TGACTGKSF 600

Db 243 BYLKGELSYGDSSHVSFLQGERTATGEKAQPTGKAKYLGNNVGYIAGDTGAGSSKGF 302

Query Db 601 NEAQDIADPIDEFKSVKGKLITQGRTDPPVENIKGEIAGNGWTGKASTTKADIGYKID 660

Db 303 TDAKVADPIDEFEKTVNGSKLITQGRDQEVTNTQIAQNGWTASTAKANAGCGYNID 362

Query Db 661 -SSSTGKSIVIENAVTGGYGPNAENGGSFTHDDSKASVWFGTQKQEVK 713

Db 363 SSSSTPNKSVIKDAEVTFGGFYGPNANEMGGSFTHNADDSSKSVVFGTCK- QEVK 415

RESULT 19

US-08-613-0094-20

; Sequence 20, Application US/08613009A

; Patent No. 609056

; GENERAL INFORMATION:

; APPLICANT: Myers, Lisa E.

; APPLICANT: Schryvers, Anthony B.

; APPLICANT: Harkness, Robin E.

; APPLICANT: Loosmore, Sheena M.

; APPLICANT: Du, Run-Pan

; APPLICANT: Yang, Yan-Ping

; APPLICANT: Klein, Michel H.

; TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella

; NUMBER OF SEQUENCES: 31

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Sim & McBurney

; STREET: 6th Floor, 330 University Avenue

CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: MSG 1R7
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent In Release #1.0, Version #1.30
 CURRENT APPLICATION NUMBER: US/08/613,009A
 FILING DATE: 08-MAR-1996
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24973
 REFERENCE/DOCKET NUMBER: 1038-542
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO:
 SEQUENCE/CHARACTERISTICS:
 LENGTH: 601 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-613-009A-20

Query Match 22 8%: Score 845 5; DB 3; Length 601;
 Best Local Similarity 35.0%; Pred. No. 1.2e-19;
 Matches 229; Conservative 100; Mismatches 202; Indels 123; Gaps 25;

Qy 99 EPKYQDYPTDKNEKEQVSIOPBAMYELKLNAAHNPAPNPKBAEKR-ALDQKDLY 147
 Db 42 KPKYEDJEKSOPESQDVSNSGAACGFAVAKLPRRNH-FNP-KYKEKHKPLGSMNDWKLUQ 99

Qy 148 AVEGDLTNPFDKLNEYLKSSVEV-SKFEAQKGSIIENTRLTHDLSSQEKEAKVKEA 206
 Db 100 RGE---PNSFSEDELKEKRSSELSLEKRSWEDQGSRVVGTNFT----- 140

Qy 207 LDNALTQFAQEKYKELIENAHDKKSNDARNDLEYKXPKGSYTAHDHKDTN-YRG 264
 Db 141 ----- 141

Qy 265 YGGALYKKGSETAKELPQTSAKYKGWDFMTDADLNKTYDLPGLARQTMWSLVSTDY 324
 Db 165 PDGYLYKKGKEPSKELPSEKITYKGWDDYTDAMEKQRFESGLGSAAGDKGSALEB- 223

Qy 325 ATLLTDKRNPKESDNGAYHSSEDFVNEADKIKKGRL-SNQLSGTAVTAKE---RYK1 379
 Db 224 -GVLRNQAEASSGHTD-FGWTSEFEYDFSDTAKTGYLRRNNTQNNENKQIKTTRYT1 281

Qy 380 EADIGHNRFGRGSSATASDKAESDTSKTOHPFTSDATNKLEGFGYGPKGEBELAGKFLDDNKLF 439
 Db 282 QATLHGNRFGRKALAAADKGA-TNGSHSFISD-SDSLEGGYGPKGEBELAGKFLSDNKVA 339

Qy 440 GYFGAK-RDKEB-----KTEAIDDAYAUGTFTNTNKATTPFTKKQLDNGNAKCLV 491
 Db 340 AVFGAQOKDKEGNAAGPATEVIDA-----TGEERPKKEQIDSFGYVKLU 389

Qy 492 LGSTVNLVSTDATKNEFTKKPFTKDKPSTSATNKAGETLWYDEVTKYKNGFEYLFKFG 551
 Db 390 VDGVESSLPLPSEGNAKAPQHEIEQ-----NGVKATVCCS-----NLDMSFGK 432

Qy 552 LSVGDSHSSVFLQGERTATGEKAVPPTGKAKYLGNNWGYLTGAGTGKS-----FNEAQD 605
 Db 433 LSKENKDMFQLGVRTPVS-DVAARTEANAKYRGTMWYGTAN-GTWSWGRASNQFTEGGN 490

Qy 606 IADFDIDPERKSVKGKLTQCRTPVNFVNIKEBAGNGWTGKASTTKADAGYKDDSSSTG 665
 Db 491 RAEFDVDFSTKRGISGTIAKRTSPAFFTAMIKONGSGVAKTGB---NGFALDPQNTG 547

Qy 666 KSVIE-NAEVGGFYGPANEMGGSPTH----DTDDSKASVFSRQOEVK 713

Db 548 NSHYTHIEATVSGGYGKNAIEMGGSFSPFGNAPEGKOKASVYFGAKRQQQLVQ 601

RESULT 20
 US-08-778-570B-26
 ; Sequence 26, Application US/08/778570B
 ; GENERAL INFORMATION:
 ; APPLICANT: Myers, Lisa E
 ; APPLICANT: Schryvers, Anthony B
 ; APPLICANT: Harkness, Robin E
 ; APPLICANT: Loosmore, Sheena M.
 ; APPLICANT: Du, Run-Pan
 ; APPLICANT: Yang, Yan-Ping
 ; APPLICANT: Klein, Michel H
 ; TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella
 ; NUMBER OF SEQUENCES: 43
 ; CORESPONDENCE ADDRESS:
 ; ADDRESSEE: Sim & McBurney
 ; STREET: 6th Floor, 330 University Avenue
 ; CITY: Toronto
 ; STATE: Ontario
 ; COUNTRY: Canada
 ; ZIP: MSG 1R7
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent In Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/778-570B
 ; FILING DATE: 03-JAN-1997
 ; CLASSIFICATION: 536
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Stewart, Michael I
 ; REGISTRATION NUMBER: 24973
 ; REFERENCE/DOCKET NUMBER: 1038-664
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (416) 595-1155
 ; TELEFAX: (416) 595-1163
 ; INFORMATION FOR SEQ ID NO: 26:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 601 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 US-08-778-570B-26

Query Match 22 8%: Score 845 5; DB 4; Length 601;
 Best Local Similarity 35.0%; Pred. No. 1.2e-49;
 Matches 229; Conservative 100; Mismatches 202; Indels 123; Gaps 25;

Qy 89 EPKIQDVPIDKNEKEQVSIOPBAMYELKLNAAHNPAPNPKBAEKR-ALDQKDLY 147
 Db 42 KPKYEDJEKSOPESQDVSNSGAACGFAVAKLPRRNH-FNP-KYKEKHKPLGSMNDWKLUQ 99

Qy 148 AVEGDLTNPFDKLNEYLKSSVEV-SKFEAQKGSIIENTRLTHDLSSQEKEAKVKEA 206
 Db 100 RGE---PNSFSEDELKEKRSSELSLEKRSWEDQGSRVVGTNFT----- 140

Qy 207 LDNALTQFAQEKYKELIENAHDKKSNDARNDLEYKXPKGSYTAHDHKDTN-YRG 264
 Db 141 ----- 141

Qy 265 YGGALYKKGSETAKELPQTSAKYKGWDFMTDADLNKTYDLPGLARQTMWSLVSTDY 324
 Db 165 PDGYLYKKGKEPSKELPSEKITYKGWDDYTDAMEKQRFESGLGSAAGDKGSALEB- 223

Qy 440 GYFGAK-RDKEB-----KTEAIDDAYAUGTFTNTNKATTPFTKKQLDNGNAKCLV 491
 Db 340 AVFGAQOKDKEGNAAGPATEVIDA-----TGEERPKKEQIDSFGYVKLU 389

Qy 492 LGSTVNLVSTDATKNEFTKKPFTKDKPSTSATNKAGETLWYDEVTKYKNGFEYLFKFG 551
 Db 390 VDGVESSLPLPSEGNAKAPQHEIEQ-----NGVKATVCCS-----NLDMSFGK 432

Qy 552 LSVGDSHSSVFLQGERTATGEKAVPPTGKAKYLGNNWGYLTGAGTGKS-----FNEAQD 605
 Db 433 LSKENKDMFQLGVRTPVS-DVAARTEANAKYRGTMWYGTAN-GTWSWGRASNQFTEGGN 490

Qy 606 IADFDIDPERKSVKGKLTQCRTPVNFVNIKEBAGNGWTGKASTTKADAGYKDDSSSTG 665
 Db 491 RAEFDVDFSTKRGISGTIAKRTSPAFFTAMIKONGSGVAKTGB---NGFALDPQNTG 547

Qy 666 KSVIE-NAEVGGFYGPANEMGGSPTH----DTDDSKASVFSRQOEVK 713

Db 548 NSHYTHIEATVSGGYGKNAIEMGGSFSPFGNAPEGKOKASVYFGAKRQQQLVQ 601

Db 141 ----- 141

Db 100 RGE---PNSFSEDELKEKRSSELSLEKRSWEDQGSRVVGTNFT----- 140

Db 165 PDGYLYKKGKEPSKELPSEKITYKGWDDYTDAMEKQRFESGLGSAAGDKGSALEB- 223

Qy 265 YGGALYKKGSETAKELPQTSAKYKGWDFMTDADLNKTYDLPGLARQTMWSLVSTDY 324

Db 165 PDGYLYKKGKEPSKELPSEKITYKGWDDYTDAMEKQRFESGLGSAAGDKGSALEB- 223

Qy 325 ATLLTDKRNPKESDNGAYHSSEDFVNEADKIKKGRL-SNQLSGTAVTAKE---RYK1 379

Db 141 ----- 141

Db 100 RGE---PNSFSEDELKEKRSSELSLEKRSWEDQGSRVVGTNFT----- 140

Db 165 PDGYLYKKGKEPSKELPSEKITYKGWDDYTDAMEKQRFESGLGSAAGDKGSALEB- 223

Qy 265 YGGALYKKGSETAKELPQTSAKYKGWDFMTDADLNKTYDLPGLARQTMWSLVSTDY 324

Db 165 PDGYLYKKGKEPSKELPSEKITYKGWDDYTDAMEKQRFESGLGSAAGDKGSALEB- 223

Qy 325 ATLLTDKRNPKESDNGAYHSSEDFVNEADKIKKGRL-SNQLSGTAVTAKE---RYK1 379

Db 141 ----- 141

Db 100 RGE---PNSFSEDELKEKRSSELSLEKRSWEDQGSRVVGTNFT----- 140

Db 165 PDGYLYKKGKEPSKELPSEKITYKGWDDYTDAMEKQRFESGLGSAAGDKGSALEB- 223

Qy 666 KSVIE-NAEVGGFYGPANEMGGSPTH----DTDDSKASVFSRQOEVK 713

RESULT 21

US-09-059-584-26

Sequence 2, Application US/09059584

Patent No. 6440701

GENERAL INFORMATION:

APPLICANT: Myers, Lisa E

APPLICANT: Schryvers, Anthony B

APPLICANT: Harkness, Robin E

APPLICANT: Loosmore, Sheena M.

APPLICANT: Du, Run-Pan

APPLICANT: Yang, Yan-Ping

APPLICANT: Klein, Michel H.

TITLE OF INVENTION: Transferrin Receptor Genes of *Moraxella*

NUMBER OF SEQUENCES: 60

CORRESPONDENCE ADDRESS:

ADDRESSEE: Sim & McBurney

STREET: 6th Floor, 330 University Avenue

CITY: Toronto

STATE: Ontario

COUNTRY: Canada

ZIP: M5J 1R7

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent In Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/059, 584

FILING DATE: 14 APR 1998

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/778, 570

FILING DATE: 03 JAN 1997

CLASSIFICATION:

ATTORNEY/AGENT INFORMATION:

NAME: Stewart, Michael I

REGISTRATION NUMBER: 24973

REFERENCE/DOCKET NUMBER: 1038-794

TELEPHONE: (416) 595-1155

TELEFAX: (416) 595-1163

INFORMATION FOR SEQ ID NO: 26:

SEQUENCE CHARACTERISTICS:

LENGTH: 601 amino acids

STRANDEDNESS: single

TOPOLOGY: Linear

US-08-448-194-2

Sequence 2, Application US/08448194

Patent No. 6028049

GENERAL INFORMATION:

APPLICANT: JACOBS, Eric

APPLICANT: LEGRAIN, Michele

APPLICANT: MAZARIN, Veronique

APPLICANT: BOUCHON-THEISEN, Bernadette

APPLICANT: SCHRYVERS, Anthony B.

APPLICANT: BLOCH, Marie-Alaine

TITLE OF INVENTION: DNA FRAGMENTS CODING FOR THE TRANSFERRIN

TITLE OF INVENTION: RECEPTOR OF NEISSERIA MENINGITIS

NUMBER OF SEQUENCES: 62

CORRESPONDENCE ADDRESS:

ADDRESSEE: Burns, Doane, Swecker & Mathis

STREET: P.O. Box 1404

CITY: Alexandria

STATE: Virginia

COUNTRY: United States

ZIP: 22313-1404

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

US-09-059-584-26

Query Match 22.8%; Score 845.5; DB 4; Length 601;

Best Local Similarity 35.0%; Pred. No. 1.2e-49;

Matches 223; Conservative 100; Mis matches 202; Index 123; Gaps 25;

Qy 89 EPKYQDVPDKNEKEQVSSQEPAMYAMEKLKRNMAHPLNPQKAEKRI-ALDQKDLV 147

Db 42 KPKYDEKSKQPESSQDVSENNSGAAYFALKPRAAH-FNP-KYKEKHPPLGSMWPKLQ 99

Qy 148 AVEGLTNPFDKRNIEYDLSKKSSEKFAEQOKGQKIEGNTNLTHDLSSQEAKAVKREA 206

Db 100 RGE--PNSFSEERDELEKRGSSSEIESKEDGSRVUVCYNTF----- 140

Qy 207 LDNALTQPAQEKYKELLENADKKS DARNRDLEYTKSGPENYLSGYTATDHDKKTN-YRG 264

Db 141 -----YVRSQTYLN--KNNIDKRNIVLFG 164

Qy 265 YYGALIYKGSSETAKELPOTSAKYKGYWDMTATLDLNKTYDLPGIAROTQWRSVLSTDEY 324

Db 165 PDGYIYKGSKEPSKELPSKELPSKITYKGWTWDTDAMKORFEGLGSAAAGDKSGALSLEE- 223

Qy 325 ATLIDKONRKPDSYDNGAYHSSEEDVNFADKCKKGKL-SNOQGTTA/TAKE--RYK1 379

Db 224 -GVLRNQAASSGHTD-FGMTESEPBVDPSDQTKTGTLFERNRITQONNSENKQIKTRYTI 281

Qy 380 BADIHGNRFRGSATASDKAEDSKTQHPTSSDATKLEGGFYGPKGEELAGKFLTDNKLK 439

Db 282 QATLIGHNRPKGKALADKG-A-TNGSHPFISD-SDSLEGGFYGPKGEELAGKFLSNDNKVA 339

Qy 440 GVFGNK-RDKV-----KTEA1LDAYALGTFFNNTNKAFFPPTKQOLDNFGNACKLV 491

Db 340 AVFGAKQDKDGENAAGPATETVDAI-----TGEFRKKEQIDSFSVVKLL 389

Qy 492 LGSTVTLNLYSDATKNEFTKFTKDPKPTSATNNAGETLNUDEVTKYGNKPEYLFKFG 551

Db 390 VDGVBELSLIPSEGNGKAFOHEIEQ-----NGYKATVCCS-----NLDYMSFGK 432

Qy 552 LSGPDSHSYFLQGERTATGEGAKVPTTGKAKYLGWNWGYITGAGTKS-----FNEAQD 605

Db 433 LSKENKDDNPLQGYTRPV3-DVAARTEANAKYRSTWYGTAN-CTSWSEASNOTEGGN 490

Qy 606 IADFDIDFERKSVKGLTTOGRTPVNFNKEIAGNGWTKRASSTTKADAGCYKTDSSSTG 665

Db 491 RAETDVFDFSTKLSLSTAKDRTPAFTITAMIKDNGFSGVAKTGE--NGFALDPQNTG 547

Qy 666 KSTYIE-NAEVTGGFVGPNANEMGGSFTH----DTDDSKASVYFEGTKRQEVK 713

Db 548 NSHYTHIATVSGGFYGNKATEMGSSFSFPGNAPKGKQKASVYFEGAKRQQLVQ 601

RESULT 22

US-08-448-194-2

Sequence 2, Application US/08448194

Patent No. 6028049

GENERAL INFORMATION:

APPLICANT: JACOBS, Eric

APPLICANT: LEGRAIN, Michele

APPLICANT: MAZARIN, Veronique

APPLICANT: BOUCHON-THEISEN, Bernadette

APPLICANT: SCHRYVERS, Anthony B.

APPLICANT: BLOCH, Marie-Alaine

TITLE OF INVENTION: DNA FRAGMENTS CODING FOR THE TRANSFERRIN

TITLE OF INVENTION: RECEPTOR OF NEISSERIA MENINGITIS

NUMBER OF SEQUENCES: 62

CORRESPONDENCE ADDRESS:

ADDRESSEE: Burns, Doane, Swecker & Mathis

STREET: P.O. Box 1404

CITY: Alexandria

STATE: Virginia

COUNTRY: United States

ZIP: 22313-1404

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent In Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/059, 584

FILING DATE: 14 APR 1998

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/778, 570

FILING DATE: 03 JAN 1997

CLASSIFICATION:

ATTORNEY/AGENT INFORMATION:

NAME: Stewart, Michael I

REGISTRATION NUMBER: 24973

REFERENCE/DOCKET NUMBER: 1038-794

TELEPHONE: (416) 595-1155

TELEFAX: (416) 595-1163

INFORMATION FOR SEQ ID NO: 26:

SEQUENCE CHARACTERISTICS:

LENGTH: 601 amino acids

STRANDEDNESS: single

TOPOLOGY: Linear

US-09-059-584-26

COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/448,194
 FILING DATE: 23-MAY-1995
 CLASSIFICATION: 435

PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/361,469
 FILING DATE: 22-DEC-1994
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/078,053
 FILING DATE: 18-JUN-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: FR 92 07493
 FILING DATE: 19-JUN-1992
 ATTORNEY/AGENT INFORMATION:
 NAME: McGowan, Malcolm M.
 REGISTRATION NUMBER: 39 300
 REPRESENTATION/DOCKET NUMBER: 016100-005
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (703) 836-6620
 TELEFAX: (703) 836-2021
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 599 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein

US-08-448-194-2

Query Match 227; Conservative 104; Mismatches 201; Indels 119; Gaps 25; Best Local Similarity 34.9%; Score 841.5; DB 3; Length 599;

Matches 227; Score 841.5; DB 3; Length 599;

PatentIn Version #1.30

Db 89 EPKYQDVPDTDNEKEQYOSIOPBANCYAMEKLKRNHAHPLPNPKNEAKRI-ALDQDKLV 147

Db 42 KPKYEDKEKQPBESQQDVSENSGAAYFALKPLPRNAH-FNP-KYKEKHKPLGSMDWKCLQ 99

Db 148 AVEGDLTNIPPDKNLIEYLKKSSEVY-SKPEAQKGIGIENTRLTHKDLSSEQKEAKVEA 206

Db 100 RGE---PNNSFSERDIEJKCROSSELKEPKSEKITYGTWYDVTDAIMEKQRFGLGSAAGDKSGALSALLE- 140

Db 207 LDNALTQFAQEKYKELIENAHDKSDARNRDLLEYKQSGFNYLSGYTTADHDKTN-YRG 264

Db 141 -----YRGTYYLN---KNNDIKNNIVLFG 164

Db 265 YYGALYYKGSETAKELPQTSARYKGWDFWTDATLDNKYTDLPGTARQTORSLVSTDEY 324

Db 165 PDGYLYYKGKEPKSEKITYGTWYDVTDAIMEKQRFGLGSAAGDKSGALSALLE- 223

Db 325 ATTLITDKNNPKPSDNYGAGSSEFDYNAFDEKIKGKL-SNQLSGTAVTAKE---RYKCI 379

Db 224 -GVLRNQEAASGHTD-FGWTSEFDFSDTIGTLYRNNTNNTKATTFTPKQDJDNFNAKKLV 281

Db 380 EADIGHNREGRGTSATDAKAEDSKTQHPFTSDATNKLEGFPYGPKEELAGKFLTDDNKLF 439

Db 282 QATLHGNRFRKSKALAADKGA-TNGSHIFFSD-SDSLEGGFPYGPKEELAGKFLSNDKVA 339

Db 440 GVFGAK-RDVKV-----KTEAII DAYA LGTFTNNTNKA TTFPKQDJDNFNAKKLV 491

Db 340 AVFGAKQDKDGENAAGPATETVIDARYI-----TGFEEFAKEQIDSFGDVKKL 389

Db 492 LGSTVNLVSTDATKNEFTKFKTQDPEATSATNKAGTFLYKTKYKSNFETLKGEG 551

Db 390 VDGVEULSLPSPGKNAQFQHLEQ-----NGKRVACCS-----NLDMNSFGK 432

Db 552 LSVGDSHSLVFOGLERTATGEKAVPITGKAKYLGWNGYITG-AGTGSFN-EAQDIAD 608

Db 433 LSKENKDDMELQGVRLPVS-DVAARTEANAKYRGTWYGLANGTWSGEASNOEGNRAE 491

Db 609 FDIDFERKSVKGKLTQGRDTPFVNFKGEIAGNGWITGASTKADAGYKIDSSSTGKSI 668

Query Match 227; Score 841.5; DB 3; Length 599;

Best Local Similarity 34.9%; Pred. No. 2.3e49; Mismatches 201; Indels 119; Gaps 25;

Db 89 EPKYQDVPDTDNEKEQYOSIOPBANCYAMEKLKRNHAHPLPNPKNEAKRI-ALDQDKLV 147

Db 42 KPKYEDKEKQPBESQQDVSENSGAAYFALKPLPRNAH-FNP-KYKEKHKPLGSMDWKCLQ 99

RESULT 24
 ; Sequence 97, Application US/08487890A
 ; General Information:
 ; APPLICANT: Loosmore, Sheena
 ; APPLICANT: Harkness, Robin
 ; APPLICANT: Schryvers, Anthony
 ; APPLICANT: Chong, Pele
 ; APPLICANT: Gray-Owen, Scott
 ; APPLICANT: Yang, Yan-Ping
 ; APPLICANT: Murdin, Andrew
 ; APPLICANT: Klein, Michel
 ; TITLE OF INVENTION: Transferrin Receptor Genes
 ; NUMBER OF SEQUENCES: 147
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESS: Sim & McBurney
 ; STREET: 6th Floor, 330 University Avenue
 ; CITY: Toronto
 ; STATE: Ontario
 ; COUNTRY: Canada
 ; ZIP: M5G 1R7
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent in Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/487890A
 ; FILING DATE: 07-12-1993
 ; CLASSIFICATION: 435
 ; PRIOR APPLICATION DATA:
 ; Sequence 97, Application US/08478435
 ; Patent No. 5922323

US-08-487-890A-97

Qy 148 AVEGLDTNIPFDKLNLEYLKSSEVV SKFEEQKGGIENNTRLHKDLSSEQEAKEVKA 206
 Db 100 RCE---PNSFSRDELEKKGSSSELETESKWDGOSRVVGVNTF----- 140
 Qy 207 LDNALTOFAEKYKELIENAHDKSNDARNDLEYKSGNTLSGTATDHDKTKN--YRG 264
 Db 141 -----YVSGTYVLN---KNNDIKNNIVLFG 164
 Qy 265 YYGALYYKGSETAKELPQTSARYKGWDFMTDATLDNKYTDLPGTAROTQWRSLYSTDEY 324
 Db 165 PDGLYLYKGKESEKELSEKTYKGWDFYTDAMEKQRFEGLSAAGDKSGALSALLE- 223
 Qy 325 ATLLTDKNNKPKPSDNGAYGHSSEEDYINPADKKGKLLI-SNQLSGTAVTAKE---RYKI 379
 Db 224 -GVLNQAEASSGHTD-FGMTESEFVDFSDTKTIGLYRNNTQNSENKOIKTTRYT 281
 Qy 380 EADIGHNRFRGSGATASDRAEDKTOPIFTSDATNKLEGFGPKGBELAGKFLTDNKLF 439
 Db 282 QATLHGNTRFKGKLAADKG-A-TNGSHSFPISD-SDSLEGGFGPKGBELAGKFLSDNKVA 339
 Qy 440 GVFGAK-RDKYB-----KTEAIDDAYALGTFENNTNKAATTFPTFKKOLDNFGNAKKLV 491
 Db 340 AVFGAKORDKEDGENAAGPATEVYDARI-----TGEFFPKKEQDSDFGIVKKL 389
 Qy 492 LGSTVINLNUSTDATKNEFTKFTKDKPTSATMKAGETLMMDEVIVKTYGKPNFBYLKFG 551
 Db 390 VDGVELSLLPSEGNNKAQHQHIEQ-----NQVATVCCS-----NLDYMSFGK 432
 Qy 552 LSGVGDHSVFLQGERTATGERAVPTKGAXYLGNWVGTYG---AGTGKSFN-EAQDIA 608
 Db 433 LSKENKDDMFQLGVRPPVS-DVAARTEANAKYRTGTYG-ZANGTWSGEASNQEGCNR 491
 Qy 609 FDIDFERKSVKGKLTQRTGRTDPVNKGTEAGNGNTKGASTTKADGGYKIDSSTGKSI 668
 Db 492 FDVDFSTKIKSCTLTARDTSPAITAMIXDNGFSGVAKTGE--NGFALDPQTGNSH 548
 Qy 669 VIE-NAEVTGGSFYGPANEMGGSFTH---DTDDSKASAVYFGTTRQEVK 713
 Db 549 YTHIATVSGSFYKNAIEMGGSFSPGNADEGKQEKASAVYFGARQOLQ 599

RESULT 25
 ; Sequence 97, Application US/08487890A
 ; General Information:
 ; APPLICANT: Loosmore, Sheena
 ; APPLICANT: Harkness, Robin
 ; APPLICANT: Schryvers, Anthony
 ; APPLICANT: Chong, Pele
 ; APPLICANT: Gray-Owen, Scott
 ; APPLICANT: Yang, Yan-Ping
 ; APPLICANT: Murdin, Andrew
 ; APPLICANT: Klein, Michel
 ; TITLE OF INVENTION: Transferrin Receptor Genes
 ; NUMBER OF SEQUENCES: 147
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESS: Sim & McBurney
 ; STREET: 6th Floor, 330 University Avenue
 ; CITY: Toronto
 ; STATE: Ontario
 ; COUNTRY: Canada
 ; ZIP: M5G 1R7
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent in Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/487890A
 ; FILING DATE: 07-12-1993
 ; CLASSIFICATION: 435
 ; PRIOR APPLICATION DATA:
 ; Sequence 97, Application US/08478435
 ; Patent No. 5922323

US-08-478-435-97

Qy 433 SKENKDDMFQLGVRPPVS-DVAARTEANAKYRTGTYGZLNGTWSGEASNQEGCNR 491
 Db 610 DIDFRKSYKGKLTTQGRIDDPVNKGTEAGNGWTGKASTTKADGGYKIDSSTGKSI 669
 Db 492 DVDFSTKIKSCTLTARDTSPAITAMIKDNGFSGVAKTGE--NGFALDPQTGNSH 548
 Qy 670 IE-NAEVTGGSFYGPANEMGGSFTH---DTDDSKASAVYFGTTRQEVK 713
 Db 549 THIATVSGSFYKNAIEMGGSFSPGNADEGKQEKASAVYFGARQOLQ 599

RESULT 25
 ; Sequence 97, Application US/08478435
 ; Patent No. 5922323

GENERAL INFORMATION:
 APPLICANT: Loosmore, Sheena
 APPLICANT: Harkness, Robin
 APPLICANT: Schryvers, Anthony
 APPLICANT: Chong, Pele
 APPLICANT: Gray-Owen, Scott
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Murdin, Andrew
 APPLICANT: Klein, Michael
 TITLE OF INVENTION: Transferrin Receptor Genes
 NUMBER OF SEQUENCES: 147
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Sim & McBurney
 STREET: Suite 701, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: MSG 1R7

COMPUTER READABLE FORM:
 COMPUTER: IBM PC compatible
 MEDIUM TYPE: Floppy disk
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patient In Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/478, 435
 FILING DATE: 07-JUN-1995
 CLASSIFICATION: 435

PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/337, 483
 FILING DATE: 08-NOV-1994

CLASSIFICATION: 435

PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/175, 116
 FILING DATE: 29-DEC-1993

PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/148, 968
 FILING DATE: 08-NOV-1993

ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24, 973
 REFERENCE/DOCKET NUMBER: 1038-462 MIS:vg
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 97:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 598 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear

US-08-478-435-97

Query Match 22.4%; Score 834; DB 2; Length 598;
 Best Local Similarity 34.8%; Pred. No. 7.6e-49;
 Matches 226; Conservative 104; Mismatches 202; Indels 118; Gaps 25;

Qy 89 EPKYQDVTDKNEKEOVSISDOPANGYAMEIQLRNAAHPLPNKNEAEKRI-ALDQDILV 147
 Db 42 KPKYEDKEKSQDPSQDVENSEGAAGFAVKLPRRNH-FNP-KYKEKHPGLSMDWKKLQ 99

Qy 148 AVEGDLTNPDKNLUYEYKKSSEYY-SKPEAQKGIGIENTRLTHKDLSSEQEAKVKEA 206
 Db 100 RGE---PNFSRDELEKRSSELEBKWQDGSSRVTGNTF----- 140

Qy 207 LDNALTQFAQEKYKELIENAHDKKSDARNRDLLEYKSGFNYLSGYTATHDKKTN-YRG 264
 Db 141 ----- 141
 Qy 265 YYGALYKGSSETAKELPQTSARYKGWDFMTDLDNKYTDLPGIAROTWRSVSTDEY 324
 Db 165 PDGLYYKGEPSKELPSEKITYKGTDYVTDAMEKQFEGLSAAGGDSGALSALLE- 223
 Qy 325 ATLLTDKNNKPKSDYNGAYHSSEFDYNFADKEKIKGLI-SNQLSGTAVTAKE---RYKI 379

Db 224 -GVLRNQAEASSGHT-FGMITSEFVD-FSDKTRIKGTLYRNRRITQNNSENKQIKTRTRYI 281
 Qy 380 EADTIGNRPRGSATPSDKAEDSKTQHPPFTSDATNKLLEGFYGPGEELAGKFLTDDNKLIF 439
 Db 282 QATLIGNRPRGKALAADGKA-TINGSHPFISD-SPSLEGGFYGPGEELAGKFLSNDNKA 339
 Qy 440 GVFZAK-RDKVETEA---ILDAYALGTFNTNTKATTPSTKKQDNEGNAAKVL 492
 Qy -----
 Db 340 AVFGAKQDKKDKDGENAAGPATEVDAYRI-----TGEETKKEQIDSFGVVKLJY 389
 Qy 493 GSTVNLVLTDTATNEFTKFTKDPKTSATNKAETBLWNDEVTKTGYKNFEVLYKFGL 552
 Db 390 DGVELSLLFSEGKNAFQHEIEQ---NGVKATVCCS---NLDYMSFGKL 432
 Qy 553 SVGDSHSVPLQGERATTCEKAVPTTGAKYLGNWVGITG--AGTGGKSFN-FAQDIADF 609
 Db 433 SKENDDMFLQGVRTPVS-DVAATTEANAKYRGTVWGTIANGTWSGEASNQEGGRNFAEF 491
 Qy 610 DIDFPRKSVYKGKLTQGRTPDVENIKGEAGNGWTKASTTAKADGGYKIDSSTGKSV 669
 Db 492 DVDFETKKSGLTAAKDRTRSPAFTTAMIKDNGFSGVAKTGE---NGFALDPQTNGNSHY 548
 Qy 670 IE-NBEVTGGFYGNANEGGSFTH---DTDSDKASVVFGTGRQEYK 713
 Db 549 THIEATVSGGFYGNRAIEMGSFSPGNAPEGKOEKAStVFGAKRQLVQ 598

RESULT 26
 US-08-337-483-97
 Sequence 97, Application US/08337483
 / Patent No. 5922562
 / GENERAL INFORMATION:
 / APPLICANT: Loosmore, Sheena
 / APPLICANT: Harkness, Robin
 / APPLICANT: Schryvers, Anthony
 / APPLICANT: Chong, Pele
 / APPLICANT: Gray-Owen, Scott
 / APPLICANT: Yang, Yan-Ping
 / APPLICANT: Murdin, Andrew
 / APPLICANT: Klein, Michel
 / TITLE OF INVENTION: Transferrin Receptor Genes
 / NUMBER OF SEQUENCES: 147
 / CORRESPONDENCE ADDRESS:
 / ADDRESSEE: Sim & McBurney
 / STREET: Suite 701, 330 University Avenue
 / CITY: Toronto
 / STATE: Ontario
 / COUNTRY: Canada
 / ZIP: MSG 1R7
 / COMPUTER READABLE FORM:
 / MEDIUM TYPE: Floppy disk
 / COMPUTER: IBM PC compatible
 / OPERATING SYSTEM: PC-DOS/MS-DOS
 / SOFTWARE: Patient In Release #1.0, Version #1.25
 / CURRENT APPLICATION DATA:
 / NAME: Stewart, Michael I
 / FILING DATE: 08-NOV-1994
 / REFERENCE/DOCKET NUMBER: 1038-462 MIS:vg
 / ATTORNEY/AGENT INFORMATION:
 / NAME: Stewart, Michael I
 / REGISTRATION NUMBER: 24, 973
 / REFERENCE/DOCKET NUMBER: 1038-462 MIS:vg
 / TELECOMMUNICATION INFORMATION:
 / TELEPHONE: (416) 595-1155
 / TELEFAX: (416) 595-1163
 / INFORMATION FOR SEQ ID NO: 97:
 / SEQUENCE CHARACTERISTICS:
 / LENGTH: 598 amino acids
 / TYPE: amino acid
 / STRANDEDNESS: single
 / TOPOLOGY: linear
 / US-08-337-483-97

TELECOMMUNICATION INFORMATION:
 REFERENCE/DOCKET NUMBER: 1038-4610 MIS:jb
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 97:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 598 amino acids
 TYPE: amino acid
 SPANDEDNESS: single
 TOPOLOGY: linear
 US-08-337-483-97

Query Match Score 834; DB 2; Length 598;
 Best Local Similarity 34.8%; Pred. No. 7.6e-49;
 Matches 226; Conservative 104; Mismatches 20; Indels 118; Gaps 25;

Qy 89 EPKYQDPTDKNEKEQVSQI QEPAMGYAMEKLRLNAHPLPNPKNEAEKRI-ALDQDKLIV 147
 Db 42 KPKYEDRSQPSQDVSNSGAAYGPAVQLPRNNAH-FNP-KYCKHPLGSMWKLQ 99

Qy 148 AVEGDLTNPFPKLN1EYKESSEV_SKFRAQKGGIENNTPLHDKLSSQKEAKVREA 206
 Db 100 RGE---PNSFSERDELEKRGKSSSELTESKWDGOSRVVGTNFT---- 140

Qy 207 LDNALTOFAQEKYKELIBNAHDKSDARNRDLEYKSGFNTLSGTYTADHDKTN-YRG 264
 Db 141 -----YVTSQGYTIN----KNDYKRNIVLFG 164

Qy 265 YYGALYYKGSESETAKELPOTSAKYKGYWDFTDATLDNKYTDLPGIAROTQWRLSYSTDEY 324
 Db 165 PPGGYYKGKPSKELPSKETIYKGTDWYTDAMEKIQFEGLGSSAMGDKSGALSLEE- 223

Qy 325 ATLLTDKRNKESDINGAYGHSSEFDINPDKKIKGKL-SHQLSGATVATKE---RYKI 379
 Db 224 -GVLRNQAEASSGHTD-FGMTESEFEDFSDTKIKGTYRNNTITONNSENKQIKTRYI 281

Qy 380 BADIHGNGRFRGSGATASDKAEDSKTOHFTSDATNKLEGFGYGPCKGELAGKFLTDNNKLF 439
 Db 282 QATLHGRFRGKALAAKGA-TNGSPPFISD-SDSLEGGFTGPCKGELAGFLSUNKVA 339

Qy 440 GVFGAK-RDKVKEKTEA----ILDAYALGTFFNNTNKAATIPTPFTKQDQFGNAKKVL 492
 Db 340 AVFGAKQDKDGENAAGPATEYDRI-----TGBEFKKEQDOSFGDVKLVL 389

Qy 493 GSTVINLIVSTDATKNEETKPKTKDPTSATKAGETLMVNDDEVTKYGRNFYELKFGEL 552
 Db 390 DGVELSLPSEGKNAFAQEHEIQ----NGVKATVICS-----NLDMNSFGKL 432

Qy 553 SVGDSHSVFLQGERTATTGKAVPTGCKAKYTLGNWVGYITG-AAGTKSFN-EAQDIADF 609
 Db 433 SKENKDDMFLQSVRTPS-DVAPRTANAKRFTGWTGYIANGTNSGEASNQEGGNRAF 491

Qy 610 DIDFERKSVKSKLTTQGRTPVNIKEIAGNGWTKASTKADAGGYKLDSSTGKSIIV 669
 Db 492 DVDFESTKISGTLTAKDRTSPASFTTAMKONGFSGVATKTE---NGFALDPONTGNSHY 548

Qy 670 1B-NAEVTGGFGPNANEAMGGSFT----DFFDSKASWVFGTRQEVK 713
 Db 549 THIEATVGGYFGKNAIEMGSSFSFGNAPBGKQEKASVYFGAKERQQLVQ 598

RESULT 27
 Sequence 97, Application US/08478373
 Patent No. 5922841
 GENERAL INFORMATION:
 APPLICANT: Losmore, Sheena
 APPLICANT: Harkness, Robin
 APPLICANT: Schryver, Anthony
 APPLICANT: Chong, Pele
 APPLICANT: Gray-Owen, Scott
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Murdin, Andrew
 APPLICANT: Klein, Michel
 TITLE OF INVENTION: Transferrin Receptor Genes
 NUMBER OF SEQUENCES: 147
 CORRESPONDENCE ADDRESS:
 ADDRESS: Sim & McBurney
 STREET: Suite 701, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: M5G 1R7
 COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent Release #1.1, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/478,373
 FILING DATE: 07-JUN-1995
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/337,483
 FILING DATE: 08-NOV-1994
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/175,116
 FILING DATE: 29-DEC-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/148,368
 FILING DATE: 08-NOV-1993
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24,973
 REFERENCE/DOCKET NUMBER: 1038-463 MIS:vg
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 97:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 598 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-478-373-97

Query Match Score 834; DB 2; Length 598;
 Best Local Similarity 34.8%; Pred. No. 7.6e-49;
 Matches 226; Conservative 104; Mismatches 20; Indels 118; Gaps 25;

Qy 89 EPKYQDPTDKNEKEQVSQI QEPAMGYAMEKLRLNAHPLPNPKNEAEKRI-ALDQDKLIV 147
 Db 42 KPKYEDRSQPSQDVSNSGAAYGPAVQLPRNNAH-FNP-KYCKHPLGSMWKLQ 99

Qy 148 AVEGDLTNPFPKLN1EYKESSEV_SKFRAQKGGIENNTPLHDKLSSQKEAKVREA 206
 Db 100 RGE---PNSFSERDELEKRGKSSSELTESKWDGOSRVVGTNFT---- 140

Qy 207 LDNALTOFAQEKYKELIBNAHDKSDARNRDLEYKSGFNTLSGTYTADHDKTN-YRG 264
 Db 141 -----YVTSQGYTIN----KNDYKRNIVLFG 164

Qy 265 YYGALYYKGSESETAKELPOTSAKYKGYWDFTDATLDNKYTDLPGIAROTQWRLSYSTDEY 324
 Db 226 Conservatve 104; Mismatches 202; Indels 118; Gaps 25;

Qy 89 EPKYQDPTDKNEKEQVSQI QEPAMGYAMEKLRLNAHPLPNPKNEAEKRI-ALDQDKLIV 147
 Db 42 KPKYEDRSQPSQDVSNSGAAYGPAVQLPRNNAH-FNP-KYCKHPLGSMWKLQ 99

Qy 148 AVEGDLTNPFPKLN1EYKESSEV_SKFRAQKGGIENNTPLHDKLSSQKEAKVREA 206
 Db 100 RGE---PNSFSERDELEKRGKSSSELTESKWDGOSRVVGTNFT---- 140

Qy 207 LDNALTOFAQEKYKELIBNAHDKSDARNRDLEYKSGFNTLSGTYTADHDKTN-YRG 264
 Db 141 -----YVTSQGYTIN----KNDYKRNIVLFG 164

Qy 265 YYGALYYKGSESETAKELPOTSAKYKGYWDFTDATLDNKYTDLPGIAROTQWRLSYSTDEY 324
 Db 165 PDGYLTYKGKPSKELPSKETIYKGTLKQKCLL-SNQLSGTVATKE---RYKI 379
 Qy 325 ATLLTDKRNKPSDNGAYGHSSEFDINPDKKIKGKL-SHQLSGATVATKE---RYKI 379
 Db 224 -GVLRNQAEASSGHTD-FGMTESEFEDFSDTKIKGTYRNNTITONNSENKQIKTRYI 281

Qy 380 EADIGNRFRGSGATASDKAEDSKTOHFTSDATNKLEGFGYGPCKGELAGKFLTDNNKLF 439
 Db 282 QATLHGRFRGKALADKGA-TNGSHPFID-SDSLEGGYGPCKGELAGKFLSDNNKVA 339

Qy 440 GVFGAK-RDKVKEKTEA----ILDAYALGTFFNNTNKAATIPTPFTKQDQFGNAKKVL 492
 Db 340 AVFGAKQDKDGENAAGPATEYDRI-----TGBEFKKEQDOSFGDVKLVL 389

Qy 493 GSTVINLIVSTDATKNEETKPKTKDPTSATKAGETLMVNDDEVTKYGRNFYELKFGEL 552
 Db 390 DGVELSLPSEGKNAFAQEHEIQ----NGVKATVICS-----NLDMNSFGKL 432

Qy 553 SVGDSHSVFLQGERTATTGKAVPTGCKAKYTLGNWVGYITG-AAGTKSFN-EAQDIADF 609
 Db 433 SKENKDDMFLQSVRTPS-DVAPRTANAKRFTGWTGYIANGTNSGEASNQEGGNRAF 491

Qy 610 DIDFERKSVKSKLTTQGRTPVNIKEIAGNGWTKASTKADAGGYKLDSSTGKSIIV 669
 Db 492 DVDFESTKISGTLTAKDRTSPASFTTAMKONGFSGVATKTE---NGFALDPONTGNSHY 548

Qy 670 1B-NAEVTGGFGPNANEAMGGSFT----DFFDSKASWVFGTRQEVK 713
 Db 549 THIEATVGGYFGKNAIEMGSSFSFGNAPBGKQEKASVYFGAKERQQLVQ 598

RESULT 27
 Sequence 97, Application US/08478373
 Patent No. 5922841
 GENERAL INFORMATION:
 APPLICANT: Losmore, Sheena
 APPLICANT: Harkness, Robin
 APPLICANT: Schryver, Anthony
 APPLICANT: Chong, Pele
 APPLICANT: Gray-Owen, Scott
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Murdin, Andrew
 APPLICANT: Klein, Michel
 TITLE OF INVENTION: Transferrin Receptor Genes
 NUMBER OF SEQUENCES: 147
 CORRESPONDENCE ADDRESS:
 ADDRESS: Sim & McBurney
 STREET: Suite 701, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: M5G 1R7
 COMPUTER READABLE FORM:

493 GSTVINLIVSTDATKNEETKPKTKDPTSATKAGETLMVNDDEVTKYGRNFYELKFGEL 552
 Db 390 DGVELSLPSEGKNAFAQEHEIQ----NGVKATVCCS-----NLDMNSFGKL 432

553 SVGDSHSVFLQGERTATTGKAVPTGCKAKYTLGNWVGYITG-AAGTKSFN-EAQDIADF 609
 Db 433 SKENKDDMFLQGVRRPVS-DVAARPANAKYRTWYGYIANGTSSGEASNQEGGNRAF 491

Qy 610 DIDFERKSVKGKLTTOGRTDPVNFKGETAGNGWTGKASTTKADAGGYKIDSSSTGKSTV 669
 Db 492 DVDFSTKKSITLTARDTSRAFTTAMKIDNGFSCVAKTGE -- NGFALDQPTNGNSHY 548

Qy 670 1E-NAEVTFGGYGPNAEMGGSFTH --- DTDDSKASVYFGTXRQQEYK 713
 Db 549 THIEATVSGGYGKNAIAEMGSSFSFFGNAPEGKOBKAASVYFGAKRQQLVQ 598

RESULT 28
 US-08-474-671-97
 ; Sequence 97, Application US/08474671
 ; Patent No. 6008326
 ; GENERAL INFORMATION:
 ; APPLICANT: Loosmore, Sheena
 ; APPLICANT: Harkness, Robin
 ; APPLICANT: Schryvers, Anthony
 ; APPLICANT: Chong, Pele
 ; APPLICANT: Gray-Owen, Scott
 ; APPLICANT: Yang, Yan-Ping
 ; APPLICANT: Murdin, Andrew
 ; APPLICANT: Klein, Michel
 ; TITLE OF INVENTION: Transferrin Receptor Genes
 ; NUMBER OF SEQUENCES: 147
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Sim & McBurney
 ; STREET: Suite 701, 330 University Avenue
 ; CITY: Toronto
 ; STATE: Ontario
 ; COUNTRY: Canada
 ; ZIP: MSG 1R7

COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/474,671
 FILING DATE: 07-1UN-1995
 CLASSIFICATION: 530
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/337,483
 FILING DATE: 08-NOV-1994
 CLASSIFICATION: 530
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/175,116
 FILING DATE: 29-DEC-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/148,968
 FILING DATE: 08-NOV-1993
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24,973
 REFERENCE/DOCKET NUMBER: 1038-465 MIS:vg
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 9:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 598 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear

Qy 148 AVEGDLTNPFDKNLIEYLKKSSEVV - SKFEAQKGGINNTRLTHKDLSEQEAKVKEA 206
 Db 100 RGE -- PNSFSDERLEKGRSSSEIESWEDGSRVSYTNF ----- 140

Qy 207 LDNALTQFAOEKYKELIENAHDKS DARNRDLTEYTKSGFNYLSGYTATDHDKTN - YRG 264
 Db 141 ----- -YVRSQGTVLN -- KNNIDIKNNIVLFG 164

Qy 265 YYGALYYKGSETAKELPQTSAKYKTYWDFMTDATDNKYTDLPGTAROTQWRSVLVSTDEY 324
 Db 165 PDGYIYKKGKEPSKELPSEKITYKCTWDYTDAKEQREGLGSAGGDGSALSALEE - 223

Qy 325 ATLTIDKNNKPSD1YNGAHSSEFVNFADKKIKGKL - SNOQSCSTAVTAKE -- -RYKL 379
 Db 224 -GVLNQAEASSGHID - FNTGTFVDFSDKTRTGLYNNRNTNNENRQIKTRTRYT 281

Qy 380 EADIGNRFPGSATASDKAEDSKTQHPPFTSDATNKLEGFFYGPCKEELACKFLTDNKL F 439
 Db 282 QATLFGNRFKGKALADKGA-TNGSHPF1SD - SDSLEGGYGPCKEELACKFLSDNKVYA 339

Qy 440 GVFGAK-RDKEVTKTA ----- ILDAYALGTFNNTNKRATTFTPFTKQOLDNFGNAKRLVL 492

Db 340 AVFGAKQDKDGENAGPATEVIDAYRI ----- TGEFKEQIDSEFGDVKLLV 389

Qy 493 GSTVNLNVSTDATAKNEFTKFTKDKPSTSATNKAGETLNYNDEVFTKTYGKRNFEYLFKEGL 552
 Db 390 DGVBESLPLPREGNKAQFHIEQ ----- -NGVKATVCCS ----- -NLDWNSFGKL 432

Qy 553 SVGDSHSVFLQGERTATTGEKAVPTGKAKYLGNGWVGITG - AGTCKGSFN - EAQDIADF 609
 Db 433 SKENRDDMF1QGVRTPV5 - DVAARTEANAKYRGTVWGYLANTGWSIGEASNOEGGNGRAEF 491

Qy 610 DIDPFRKSYKGKLTQGRDTPFVNKGELAGNGPTGKASTTKADGGYKIDSSTGKSIV 669
 Db 492 DVDFSTKKSITLTARDTSRAFTTAMKIDNGSSGVAKTGB -- NGFALDQPTNGNSHY 548

Qy 670 1E-NAEVTFGGYGPNAEMGGSFTH ----- DTDDSKASVYFGTKRQQEYK 713
 Db 549 THIEATVSGGYGKNAIAEMGSSFSFFGNAPEGKOBKAASVYFGAKRQQLVQ 598

RESULT 29
 US-08-483-577A-97
 ; Sequence 97, Application US/08483577A
 ; Patent No. 601568
 ; GENERAL INFORMATION:
 ; APPLICANT: Loosmore, Sheena
 ; APPLICANT: Harkness, Robin
 ; APPLICANT: Schryvers, Anthony
 ; APPLICANT: Chong, Pele
 ; APPLICANT: Gray-Owen, Scott
 ; APPLICANT: Yang, Yan-Ping
 ; APPLICANT: Murdin, Andrew
 ; APPLICANT: Klein, Michel
 ; TITLE OF INVENTION: Transferrin Receptor Genes
 ; NUMBER OF SEQUENCES: 160
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Sim & McBurney
 ; STREET: Suite 701, 330 University Avenue
 ; CITY: Toronto
 ; STATE: Ontario
 ; COUNTRY: Canada
 ; ZIP: MSG 1R7
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patentn Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/483,577A
 ; FILING DATE: 07-JUN-1995
 ; CLASSIFICATION: 530
 ; PRIORITY NUMBER: US 08/337,483
 ; FILING DATE: 08-NOV-1994
 ; NUMBER OF SEQUENCES: 160
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Sim & McBurney
 ; STREET: Suite 701, 330 University Avenue
 ; CITY: Toronto
 ; STATE: Ontario
 ; COUNTRY: Canada
 ; ZIP: MSG 1R7
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patentn Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/483,577A
 ; FILING DATE: 07-JUN-1995
 ; CLASSIFICATION: 435
 ; PRIORITY NUMBER: US-09-673-133-6.rai

Qy 89 EPKYQDPTDKEQCGVSTQEPANGYAMENLKLRYAHAPNPKNEAEKRI - ALDQDKDLV 147
 Db 42 KPKYEDDEKSQPESSQQDVSSENSGAAYGFAVQLPRNAH-FNP - KYKEKHPBLGSMDWKKLQ 99

APPLICATION NUMBER: US 08/337,483
 FILING DATE: 08-NOV-1994
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/175,116
 FILING DATE: 29-DEC-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/148,968
 FILING DATE: 08-NOV-1993
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24,973
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEX/FAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 97:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 598 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-483-577A-97

Query Match 22.4%; Score 834; DB 3; Length 598;
 Best Local Similarity 34.8%; Pred. No. 7.6e-19;
 Matches 226; Conservative 104; Mismatches 202; Indels 118; Gaps 25;

Qy 89 EPKIQDQPTDKNEKEQSISSOPDAMGAMELKRNAPNPKNEAEKRI-ALIQQDLV 147
 Db 42 KPKYEDKRSQPSQQDVSNSGAAYGFAVKLPRRNAH-FNP-KYREKHPKGSMWKKLQ 99

Qy 148 AVEGDLTNPFDGLNLYEKKSESVV-SKFEAQKGQTENNTRLTHKDLSSEQKEAKVKEA 206
 Db 100 RGB---PNPSFSDLELKKRSSELELTSKWDGQSDVGTNTF---- 140

Qy 207 LDNALTQFAQEKYKELIENAHDKKSARNRDLEYKKSGFNYLSGYTATHDKTKTN-YRG 264
 Db 141 -----YVRSQGYYLNL--KNNIDIKONIVLFG 164

Qy 265 YFGALTYKGSTETAKEDPQTSANKYKGWDFMTDNLNQYTDLPGJARQTWRSLSVSTDY 324
 Db 165 PDGYLYKGKPEKSKPEKITYKGWDTYDAMEKORFEGSGSAAGDGSALAEY- 223

Qy 325 ATLLTDKRNPKPSDYNGAYGHSESEDFYNFADRKIGKRLI-SNQLSGTAVTAKE---RYKI 379
 Db 224 -GVLRNQAEASGHTD-FGNTSEFEVDSDTKEIGLYRNRTIQNSENQKIKTRYT 281

Qy 380 EADIHGENRERGTSASDKAEDSKTQHPTSDATNKLEGFGYGPKGKPELAKGKFLTDNNKL 439
 Db 282 QATLHGNRFGKRALAADKG-TNGSHIPFISD-SDSLEGGFGYGPKGKPELAKGFLSDNPKVA 339

Qy 440 GVFGAK-RDVEKTA---ILDVALGFTNNIKATTFPTFKQLNFGNARKVL 492
 Db 340 AVFGAQOKDKGENDAGGATEVIDAYRI-----TGEFFKEQIDSFGDVKKLVL 389

Qy 493 GSTVINLUSTDATKNEFTKFTKDKTSATNKAGETLMVNDDEVIVTKYGRNFYELKFGEI 552
 Db 390 DGVELSLIPSENSKAQFQE-----NGVKAIVC 432

Qy 553 SVGDSHSVFLGQERTTATGEKAVPTGKAKIGNWGYTG-AAGTKSKEN-EAQDIADF 609
 Db 433 SKENKDDMFLQSVRTPS-DVAARTEANAKYRGTVYIANGTNSGEASQEGGNRAEF 491

Qy 610 DIDFERKSVKGLDTTQERTDPVFNIGEAGNGWTKA-STKADAGGYKIDSSSTKSV 669
 Db 492 DVDFSTKKISGTLTAQRTSAPTTAMIKONGFSGVAKTGE--NGEALDPONTONSHY 548

Qy 670 1B-NAEVTGGFGYGNANBMCGSFTH---DTDDSKASVYFGTKRQOEVK 713
 Db 549 THIEATVSGGYGKNAIEMGGSFSFPGNAPSGKQERKASVFGAKRQLVQ 598

Qy 89 EPKIQDQPTDKNEKEQSISSOPDAMGAMELKRNAPNPKNEAEKRI-ALIQQDLV 147
 Db 42 KPKYEDKRSQPSQQDVSNSGAAYGFAVKLPRRNAH-FNP-KYREKHPKGSMWKKLQ 99

Qy 148 AVEGDLTNPFDKLNLYEKKSESVV-SKFEAQKGQTENNTRLTHKDLSSEQKEAKVKEA 206
 Db 100 RGB---PNPSFSDLELKKRSSELELTSKWDGQSDVGTNTF----- 140

Qy 207 LDNALTQFAQEKYKELIENAHDKKSARNRDLEYKKSGFNYLSGYTATHDKTKTN-YRG 264
 Db 141 -----YVRSQGYYLNL--KNNIDIKONIVLFG 164

CORRESPONDENCE ADDRESS:
 ADDRESSEE: Sim & McBurney
 STREET: 6th Floor, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: MSG 1R7

COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US 08/649,518
 FILING DATE: 17-NOV-1996
 CLASSIFICATION: 536
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/337,483
 FILING DATE: 08-NOV-1994
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/483,577
 FILING DATE: 07-JUN-1995
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/175,116
 FILING DATE: 29-DEC-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/148,968
 FILING DATE: 08-NOV-1993
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I.
 REGISTRATION NUMBER: 24,973
 REFERENCE/DOCKET NUMBER: 1038-608
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 LENGTH: 598 amino acids
 TYPE: amino acid
 STRANDEDNESS: Single
 TOPOLOGY: linear
 US-08-649-518-97

Query Match 22.4%; Score 834; DB 3; Length 598;
 Best Local Similarity 34.8%; Pred. No. 7.6e-49;
 Matches 226; Conservative 104; Mismatches 202; Indels 118; Gaps 25;

Qy 89 EPKYQYQPTDRNEKEQYSSIQEPANGYAMEKLKNRHAHPLNPKNRKEAKRI-ALDOKDLY 147
 Db 42 KPKYEDDKSQQPSQPSQVSENSGAAGYCFAVLPRRAH-FNP-KYKEKHPKLGSMWDKKLQ 99

Qy 148 AVEGDLTINPPDKNLBYLKKSSSTV-SKEFAQKGIGTENTRLTHKDLSSBQKEAKVKA 206
 Db 100 RGE--PNSFERDELEKRGSSSELIESKWDGSDQSRVVGTYNTF----- 140

Qy 207 LDNALTQFQAQEKYKELIENAHDKKSPDARNDLEYKSYGSFNYLSGYTADHDKTN-YRG 264
 Db 141 ----- 164

Qy 265 YYGALYYKKGSETAKELPQTSAKYKGWDFMTDATLDNKYTDLPGIAROTQWSLVSTDEY 324
 Db 165 PDGYLYKQGPSPKELPSKELPSKITYKGTMWDYTDAMEMQRFGLGSAGGDKSGALSLEE- 223

Qy 325 ATLLTDKNNKERSDINGAYGHSSEDFNADKIKGKL-SNQLSGTAVTAKKE--RYKI 379
 Db 224 -GVLRNQAEASGHTD-FGNTSEFEVDFSOKTKTLYRNNTQNSNKOIKUTRTYI 281

Qy 380 EADIGHGNRFRGSATASDKAEDSKTOHPSDATKLEGGFYGPKGSEBELAKGKFLTDNNKF 439
 Db 282 QATLHNRFQKALADKGA-TNGSHPFISD-SDSEGGTYGPKCEBELAKGKFLSDDNKA 339

Qy 440 GVFGAK-RDVKVTEA-----ILDAYALGTFFNNNTKATTFPTKQKLDNFGNAAKKVNL 492

340 AVFGAKQDKKGENAAGPATEVIDAYRI-----TGEEFKKEQIDSFGDVTKLVL 389
 493 GSTV1NLVSTDATKNEFTKFTKPKPTSATNKAGETLMYDEVITKTYGNFVEYLKGEL 1
 390 DGVELSLPSEGNAKAFOHEIEQ-----NGVKATVCCS-----NLDVNSFGKL 432
 553 SVDGDSHSVQFQGERTATTGEKAVPPTGKAKYLGWNGYTG--AGTGKSN-EAQDIADF 609
 433 SKENRDMFQGVRTPVS-DVAARTEANAKYRGTVWGLANGTSWGEASNOEGGNRAEF 491
 Qy 610 DIDFBRKSYKGKLMTQGRTPVFNKEGETAGNGWNGKASTTKADGGYKIDSSSTGKSV 669
 Db 492 DVDFSTKKISGTLTAKDRISPAFTTAMIKDNGFSGVAKTGE--NGFALDPONTGNSHY 548
 Qy 670 IE-NAEVTTGGFYGPNANEMGSFETH-----DTDSKASAVYFGTKRQQEYK 713
 Db 549 THIATVSGSFYGRDAIEMGSFSSPGNAPEGKQKOEKAVYFGAKRQQLVQ 598

RESULT 33
 US-08-448-194-61
 ; Sequence 61, Application US/08448194
 ; Patent No. 6028049
 ; GENERAL INFORMATION:
 ; APPLICANT: JACOBS, Eric
 ; APPLICANT: LEGRAIN, Michele
 ; APPLICANT: MAZARTIN, Veronique
 ; APPLICANT: BOUCHON-THESEN, Bernadette
 ; APPLICANT: SCHRYVERS, Anthony B.
 ; APPLICANT: BLOCH, Marie-Aline
 ; TITLE OF INVENTION: DNA FRAGMENTS CODING FOR THE TRANSFERRIN
 ; TITLE OF INVENTION: RECEPTOR OF NEISSERIA MENINGITIS
 ; NUMBER OF SEQUENCES: 62
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Burns, Doane, Swecker & Mathis
 ; STREET: P. O. Box 1404
 ; CITY: Alexandria
 ; STATE: Virginia
 ; COUNTRY: United States
 ; ZIP: 22313-1404
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/448,194
 ; FILING DATE: 23-MAY-1995
 ; CLASSIFICATION: 435
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/361,469
 ; FILING DATE: 22-DEC-1994
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/448,194
 ; FILING DATE: 18-JUN-1993
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: FR 92 07493
 ; FILING DATE: 19-JUN-1992
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: McGowan, Malcolm M.
 ; REGISTRATION NUMBER: 29,300
 ; REFERENCE/DOCKET NUMBER: 016100-005
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (703) 836-6620
 ; TELEFAX: (703) 836-2021
 ; INFORMATION FOR SEQ ID NO: 61:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 578 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: DNA (genomic)
 US-08-448-194-61

Query Match Similarity Score 828; DB 3; Length 578;
 Best Local Similarity 35.0%; Pred. No. 1.9e-48;
 Matches 228; Conservative 100; Mismatches 202; Indels 122; Gaps 26;

Qy 89 EPKYQDPVTDKNEKEQVSISIOPBANCYAMEYLKLRNAHPLPNKRNKAERK1-ALDQDKL1V 147
 Db 22 KPKYEDKEKSQPESSQDVSENGAAYGFAVLPKPRNHA-FNP-KYKBRKHEPLGSMDWKLUQ 79

Qy 148 AVEGDITNIPPDKNLJTEYLKKSSEVY-SKPEAQKGGLIENTRLTHKDLSSEQKEAKVKEA 206
 Db 80 RGE--PNSFSEDELEKRSSESELJESWEDQSRVGYTNFT----- 120

Qy 207 LDNALTOQAFQKSYKELIENAHDKKSDARNDLEYKSGFNYLSGYTATDHDKKN--YRG 264
 Db 121 -----YRSGTYYLN--KNNDIKRNIVLFG 144

Qy 265 YYGALYKKGSETAKELPQTSAYK1KEYWDFMTDATLDNKTYDLPGIAROTQWRSVYSTDEY 324
 Db 145 PGDLYKKGKEPKSKEPKSITYKTWDYDIDAMEKORFEG--GSAAGGDKSGALSALEE 202

Qy 325 ATLLTDKNN-KPSDYGAYCHSSSEFVYNAFKKIKGKL1-SNOLSGTAYTAKE---RKF 378
 Db 203 GVL--RNQAAASSGGTDFGNTSEFVDSDFKTKTGTLVNNR1TQNNSENKQIKTTRT 259

Qy 379 IEDADHGMRFRGSSATASDKAEDSKTQHOPFTSDATNKLEGFPYGPKEELAGKFTDDNL1 438
 Db 260 IQATLHGNRTPKGKALAADKGKA-TNGSHPF1SD-SDSLEGGFYPGKEELAGKELNSDNKRV 317

Qy 439 FGVFGAK-RDKVE-----KTEAIDAYA1GFTNNTNKAFFTPFTK1KOLDNFGNNAKXL 490
 Db 318 AAVFGAKQDKDGENAAGGPAETVDAK1-----TGEFFKKEQ1DSFGDVKL1 367

Qy 491 VLGSTVINYLSTDAKNEFTKFTKDKPBTANKAGETLMNDEVTKYKGKNEYLKG 550
 Db 368 LVDGVBLSLPSEGKNAKAFOHEIEQ-----NGYKATVCCS-----NLDDYMSRG 410

Qy 551 ELSVGDSHSSVFLQGERTATGEKAFTP1GAKY1LGNWGV1ITG--AGIGKGSFN-PAQDDA 607
 Db 411 KLSKENKDD1MFLQG1RTPVS-DVAARTEANAKYRTWGYIANGTWSWGEASNQEGGNRA 469

Qy 608 DFDIDFERSKVKGLUTTG3RTDPVN1KG1AGNGWTGKASTTKADAGGYKIDSSTS1GK 667
 Db 470 EFDVDESTKKS1G1TAKDRTSPAFITAM1KDGNSFGVAKTGE--NGFALDPONTGN1 526

Qy 668 IVIE-NAETVCGFYGNAENMGGSFT-----DTDDSKASVVFCTKRCQEVK 713
 Db 527 HYTHIEATVSGFYGNAENGGFSFPGNAPEGRQEAQASVVFCAKRCQEVQ 578

RESULT 34 US-08-867-921-61
 Sequence 61, Application US/08867921
 Patent No. 6326350

GENERAL INFORMATION:
 APPLICANT: JACOBS, Eric
 APPLICANT: LEGRAIN, Michelle
 APPLICANT: MAZARIN, Veronique
 APPLICANT: BOUCHON-THEISEN, Bernadette
 APPLICANT: SCHRYVERS, Anthony B.
 APPLICANT: BLOCH, Marie-Aline
 TITLE OF INVENTION: DNA FRAGMENTS CODING FOR THE TRANSFERRIN NUMBER OF SEQUENCES: 62
 CORRESPONDENCE ADDRESS:
 ADDRESSEES: BURNS, DOANE, SWECKER & MATHIS
 STREET: P.O. Box 1404
 CITY: Alexandria
 STATE: VA
 COUNTRY: USA
 ZIP: 22313-1404
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC Compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/867,921
 FILING DATE: 03-JUN-1997
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/445,472
 FILING DATE: 22-MAY-1995
 APPLICATION NUMBER: US 08/361,469
 FILING DATE: 22-DEC-1994
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/078,053
 FILING DATE: 18-JUN-1993
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: PR 92 07493
 ATTORNEY/AGENT INFORMATION:
 NAME: McGowan, Malcolm K.
 REGISTRATION NUMBER: 39,300
 REFERENCE/DOCKET NUMBER: 016100-004
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (703) 836-6620
 TELEFAX: (703) 836-6621
 INFORMATION FOR SEQ ID NO: 61:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 578 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 US-08-867-921-61

Query Match Similarity Score 828; DB 3; Length 578;
 Best Local Similarity 35.0%; Pred. No. 1.9e-48;
 Matches 228; Conservative 100; Mismatches 202; Indels 122; Gaps 26;

Qy 89 EPKYQDPVTDKNEKEQVSISIOPBANCYAMEYLKLRNAHPLPNKRNKAERK1-ALDQDKL1V 147
 Db 22 KPKYEDKEKSQPESSQDVSENGAAYGFAVLPKPRNHA-FNP-KYKBRKHEPLGSMDWKLUQ 79

Qy 148 AVEGDITNIPPDKNLJTEYLKKSSEVY-SKPEAQKGGLIENTRLTHKDLSSEQKEAKVKEA 206
 Db 203 GVL--RNQAAASSGGTDFGNTSEFVDSDFKTKTGTLVNNR1TQNNSENKQIKTTRT 259

Qy 265 YYGALYKKGSETAKELPQTSAYK1KEYWDFMTDATLDNKTYDLPGIAROTQWRSVYSTDEY 324
 Db 325 ATLLTDKNN-KPSDYGAYCHSSSEFVYNAFKKIKGKL1-SNOLSGTAYTAKE---RKF 378
 Db 414 AVEGDITNIPFDQNL1EYLKKSSEVY-SKPEAQKGGLIENTRLTHKDLSSEQKEAKVKEA 206
 Db 415 YYGALYKKGSETAKELPQTSAYK1KEYWDFMTDATLDNKTYDLPGIAROTQWRSVYSTDEY 324
 Db 416 PDGYLYKKGKEPKS1G1TAKDRTSPAFITAM1KDGNSFGVAKTGE--NGFALDPONTGN1 526
 Db 417 AVEGDITNIPFDQNL1EYLKKSSEVY-SKPEAQKGGLIENTRLTHKDLSSEQKEAKVKEA 206
 Db 418 AVEGDITNIPFDQNL1EYLKKSSEVY-SKPEAQKGGLIENTRLTHKDLSSEQKEAKVKEA 206
 Db 419 YYGALYKKGSETAKELPQTSAYK1KEYWDFMTDATLDNKTYDLPGIAROTQWRSVYSTDEY 324
 Db 420 PDGYLYKKGKEPKS1G1TAKDRTSPAFITAM1KDGNSFGVAKTGE--NGFALDPONTGN1 526
 Db 421 AVEGDITNIPFDQNL1EYLKKSSEVY-SKPEAQKGGLIENTRLTHKDLSSEQKEAKVKEA 206
 Db 422 KPKYEDKEKSQPESSQDVSENGAAYGFAVLPKPRNHA-FNP-KYKBRKHEPLGSMDWKLUQ 79

Qy 423 AVEGDITNIPFDQNL1EYLKKSSEVY-SKPEAQKGGLIENTRLTHKDLSSEQKEAKVKEA 206
 Db 424 AVEGDITNIPFDQNL1EYLKKSSEVY-SKPEAQKGGLIENTRLTHKDLSSEQKEAKVKEA 206
 Db 425 AVEGDITNIPFDQNL1EYLKKSSEVY-SKPEAQKGGLIENTRLTHKDLSSEQKEAKVKEA 206
 Db 426 AVEGDITNIPFDQNL1EYLKKSSEVY-SKPEAQKGGLIENTRLTHKDLSSEQKEAKVKEA 206
 Db 427 AVEGDITNIPFDQNL1EYLKKSSEVY-SKPEAQKGGLIENTRLTHKDLSSEQKEAKVKEA 206
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US-08-064-174-1

Sequence 1, Application US/08064174

Patent No. 5618540

GENERAL INFORMATION:

APPLICANT: QUENTIN-MILLET, Marie-Jose

APPLICANT: LISSOLO, Ling

TITLE OF INVENTION: SUBUNIT VACCINE FOR NEISSERIA MENINGITIS INFECTIONS AND CORRESPONDING PURIFIED SUBUNITS

NUMBER OF SEQUENCES: 2

TITLE OF INVENTION: MENINGITIS INFECTIONS AND CORRESPONDING PURIFIED SUBUNITS

NUMBER OF SEQUENCES: 2

CORRESPONDENCE ADDRESS:

ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS

STREET: George Mason Bldg., Washington & Prince Sts.

CITY: Alexandria

STATE: Virginia

COUNTRY: United States

ZIP: 22313-1404

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: PC DOS/MS-DOS

SOFTWARE: Patent in Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/064,174

FILING DATE: 25-MAY-1993

CLASSIFICATION: 424

PRIOR APPLICATION DATA:

APPLICATION NUMBER: FR 91 12176

FILING DATE: 03-OCT-1991

ATTORNEY/AGENT INFORMATION:

NAME: Rea, Teresa Stanek

REGISTRATION NUMBER: 30,427

REFERENCE/DOCKET NUMBER: 016100-001

TELECOMMUNICATION INFORMATION:

TELEPHONE: 703/836-6520

TELEFAX: 703/836-2021

INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:

LENGTH: 579 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-064-174-1

Query Match 22.2%; Score 824.5; DB 1; Length 579;

Best Local Similarity 34.6%; Pred. No. 3 2e-48;

Matches 225; Conservative 105; Mismatches 202; Indels 119; Gaps 25;

89 EPKYQDVPTDKNEKQVSIQEPANGYAMSLKLNRNAAHPLNPKNKEAEKRI-ALDQKDQV 147

22 KPKYDEKSKQPEQDQVSENSGAAGFAVLPRLRNAAH-FNP-KYKEKHPGLGSDNDWKKLQ 79

148 AVEGDLTNPDPDNLIEYLLKKSSEV-SKFBAAQKGIGIENTRLTHDLSSEQKEAKVREA 206

80 RGE---PNSFSERDLEKRGSSSELIESKMEQDGSRVRVGYTNFT----- 120

Query 207 LDNALTQFAEQKVKELIENAHDKSDARNDLEYKSGFNYLSGYTATDHDKTN--YRG 264

121 -----YVRSGTVLN---KNNIDKRNIVLFG 144

Qy 265 YYGAIYKYGSETAKELPQTSAKYKTYWGTIANGTSWSGRASNOEGGNA 469

Db 145 PDGIIYKYGKEPSKELPSEKITYKOTWIDVTDANEKQRREGGDSGALSALEE 203

Qy 325 ATLJDKNKPKPSDYNAGCHSSSEPVNFADKKIKGKL-SNOLSGSTAVTAKE---RYK 379

Db 204 -GVDRNQAEASSGHTD-FGNTSEBFVDFSDKPTKOTKLYNNRITONNSENKQIKTRYT 261

Qy 380 EADIGNRPFGSATPSDKRQHPSDATNKLLEGFPYGPKEBELACKELTDNKL F 439

Db 262 QATLFGNRPKGKALAADKG-A-TNGSHPPFSD-SOSLEGFPYGPKEBELACKELFSDNDKVA 319

Qy 440 GVFGAK-RDKVE-----KTEAII DAYA LGTFNNTNKA TATTFTPTKQDLDNFGNNAKLV 491

Db 320 AVFGAKQKQKXKGDGENAAGPATEYIDAYR-----TGEERKKEQIDSGFVTKL 369

Qy 492 LGSTWIVNLYSTDATNEFTIKFTKDPKTSATNKA GETLMVNDEVTKYKGNFEXYLKPG 551

Db 370 VDGVLWLSLUPSEVCGNAAFOHEIEQ-----NGLMDSFGK 412

Qy 552 LSVGASHSHFLQGERTATGKAVFTGKAKYLGWNGVGTG-ACTGSKSFN-ENODIAD 608

Db 413 LSKENKDDMFLQGORTPV-S-DVAARTEAKYRGTCWGYGTANGWSGRASNOEGGNRAE 471

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Db 472 FDVDSSTKKSGLTAKDTSPTATIANKDNGFSGVKTGE--NGFALDPONTGNSH 528

Qy 669 VIE-NAEVTTGGFYGYGNANEMGGSPFH-----DTDDSKASVVFGRTRQQEYK 713

Db 529 YTHTEATVSGGFGYRNATEMGGSFSPGNAPEGKOEKA SVFGARQQLVQ 579

RESULT 36

US-08-064-167-1

; Sequence 1, Application US/08066167

; Patent No. 5618541

; GENERAL INFORMATION:

; APPLICANT: QUENTIN-MILLET, Marie-Jose

; TITLE OF INVENTION: VACCINE AGAINST NEISSERIA MENINGITIS

; NUMBER OF SEQUENCES: 4

; TITLE OF INVENTION: INFECTIONS

; NUMBER OF SEQUENCES: 4

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Burns, Doane, Swecker & Mathis

; STREET: George Mason Bldg., Washington & Prince Sts.

; CITY: Alexandria

; STATE: Virginia

; ZIP: 22313-1404

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC DOS/MS-DOS

; SOFTWARE: Patent in Release #1.0., Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/066,167

; FILING DATE: 02-JUN-1993

; CLASSIFICATION: 424

; PRIORITY APPLICATION DATA:

; REFERENCE NUMBER: 5618541

; ATTORNEY/AGENT INFORMATION:

; NAME: Rea, Teresa Stanek

; REGISTRATION NUMBER: 30,427

; REFERENCE/DOCKET NUMBER: 016100-001

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 703/836-6520

; TELEFAX: 703/836-2021

; INFORMATION FOR SEQ ID NO: 1:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 579 amino acids

; TYPE: amino acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: peptide

; APPLICATION NUMBER: US/08/066,167

; FILING DATE: 02-JUN-1993

; CLASSIFICATION: 424

; PRIORITY APPLICATION DATA:

; REFERENCE NUMBER: 5618541

; ATTORNEY/AGENT INFORMATION:

; NAME: Crane-Feury, Sharon E

; REGISTRATION NUMBER: 36,113

; REFERENCE/DOCKET NUMBER: FR 91 12177

; FILING DATE: 03-OCT-1991

; ATTORNEY/AGENT INFORMATION:

; NAME: Crane-Feury, Sharon E

; REGISTRATION NUMBER: 36,113

; REFERENCE/DOCKET NUMBER: 016100-002

; TELEPHONE: (703) 836-6620

; TELEFAX: (703) 836-2021

; INFORMATION FOR SEQ ID NO: 1:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 579 amino acids

; TYPE: amino acid

Strandedness: single						
Topology: linear						
Molecule Type: protein						
Original Source: ORGANISM: Neisseria meningitidis 2394 subunit Tbp2.						
US-08-066-1167-1						
Query Match	22.2%	Score 824.5;	DB 1;	Length 579;		
Best Local Similarity	34.6%	Prod. No. 3.2e-48;				
Matches 225;	Conservative 105;	Mismatches 202;	Indels 119;	Gaps 25;		
Qy 99	EPKQYQVPTDKNEKEQVSSIQEPAAGYAMELKLIRNAHDLNPNGKEAKRKL-ALDQKLV	147				
Db 22	KPKYEDKRSQPEQQDVSSENSGAAYGFAVKLPPRNNAH-FNP-KYKEKHPGKPLGSMDWKQKIQ	79				
Qy 148	AVEGDLTNPFDKLIEYLRKSSBEV-SKPEAQDQGGTENNRNTRLTHKDLSSEQKEAKYKEA	206				
Db 80	RCE--PNSPFSERDELKRGSSSELIEKREWEDQSRVQYGTNTT-----	120				
Qy 207	LDNALTOFAQEKYKELLENADRKSDAARNDLLEYKSGFNYLSGYTATDHDKXTN--YRG	264				
Db 121	-----YVRSYYVILN--KRNIDIKNNIVFG	144				
Qy 265	YGGALIYKXKGSETAKELPOTSAKXKGWNWEMTADLNDKTYTDLPGIARATQWRSLSVSTDEY	324				
Db 145	PDGYLYKXKGKEPSKELPEKITYKGTMWYVTDAEMEKOFRFEGLGSAAGCDKGSALAE-----	203				
Qy 325	ATULLDKNPKPSDNGYAGHSSEFDVNPADKKKGKLJL-SNQUSGJATVAKTE---RPKI	379				
Db 204	-GVLRNQAEASSCHTD-FGMITSEFEVUDSDKTKTGTLYPNRITQNSBNKQIKTTRTY	261				
Qy 380	EADIGHGNRFRGSATASDQVAEDSNTQHPTSDATNKLLEGQFYGPKGEELAGKFLTDDNKLIF	439				
Db 262	QATLHGRFKGKLAADIGA-TNGSHPKLSD-SDSLGSGFYGPKGEELAGKFISNDNVA	319				
Qy 440	GVEGAK-RDKV-----KTEAILEDKVALGTPTNNTKATTPTPDKYQDNGNQAKLIV	491				
Db 320	AVFGAKQDKKQGENAACGAPATEVIDAVRI-----TGEEFKKQOIDSTGSDVVKIL	369				
Qy 492	LGSTVINVSTDATKNEETKKPKTDKPKPSATNKGAEETLVNNDDEVTKYTKGNPFEYLKRG	551				
Db 370	VDCVSELLPLPSENKAKRQHEI-----NUKVKATVCCS-----NLDYMSFGK	412				
Qy 552	LSVGDSHSHVSEFLOGERTATGEKAVPPTGKAKYLVGNWYGTG--AGTGKSPN-EAQDIA	608				
Db 413	LSKRNODMFLQGVRTPS-DYARTEKRYGTWYIANGTWSGASNOEGGNAE	471				
Qy 609	FDDIFERKSVKGKLTTCQRTDPMVNIKEBAGNWTGKASTTRADAGGYKIDSSTS	668				
Db 472	FVDFDSITKISGTLTAKRTTSPAITAMIKONGFS3YAKTGE--NGSFALDPQNTGNSH	528				
Qy 669	VIE-NAEVTTGGFYGPNAHEMGGSFTH-----DUDDSKASAVVFGTKRQEVVK	713				
Db 529	YTHIEATVSGGFYGRNAHEMGGSFSPPNAPEGQKERAHSVFGAKRQQLV	579				

Db	472 FDDVDSSTKISGTULAKDRSPASFTTAMIKDNGSGSVARTGE---NGFALDPONTGN SH	528	487 AGAATHNSTLNGHFLFLGERTSLT---DMAKQSGAAKYIGTWOANFLSSKGQVGSYDAG	544
Qy	669 VIE-NAEVTGGFYGNANENGGSFTH---DTDDSKASVFGTTRQQEVK 713		598 KSFNIEA-QDIAFDDFERKSVKGKLTQGRTDPVNFKG-BIANGNGWTGKASTTKADAG	655
Db	529 YTHIATVSGCGFYGNANENGGSFSPGNAPEGKOEKA SVFGARRQQLVQ 579		545 DPRNDGKSAEFDN/FGGKTVTGFEDADGQIQLPMTDSKIEENGSGTAKT---G 600	
Qy	656 GYKIDSSSTGKSVI--ENAEVTCGGFYGPNAEMGSFTHDDSKASVFGTTRQQ 710			
Db	601 SLQLDKGSTGAGTIVPTFTDAKVDGAFYGPNAEIGGITSNGTGDVGGFCAKOE 657			
	RESULT 38			
	Sequence 3, Application US/09405728			
	Patent No. 6391316			
	GENERAL INFORMATION:		RESULT 39	
	APPLICANT: Potter, Andrew A.	US-07-961-522-4	Sequence 4, Application US/07961522	
	APPLICANT: Rioux, Clement	Patent No. 5417971	GENERAL INFORMATION:	
	APPLICANT: Schryver, Anthony B.	APPLICANT: POTTER, ANDREW A.	APPLICANT: GBLACH, GERALD F.	
	TITLE OF INVENTION: CLONING AND EXPRESSION OF HAEMOPHILUS SOMNUS	APPLICANT: WILLSON, PHILIP J.	APPLICANT: ROSSI-CAMPOS, AMALIA	
	FILE REFERENCE: 9000-0049.20	APPLICANT: ROSSICAMPOS, AMALIA	TITLE OF INVENTION: VACCINES FOR ACTINOBACILLUS	
	CURRENT APPLICATION NUMBER: US/09/405,728	NUMBER OF SEQUENCES: 9	TITLE OF INVENTION: PLEUROPNEUMONIAE	
	CURRENT FILING DATE: 1999-09-24	CORRESPONDENCE ADDRESS:		
	EARLIER APPLICATION NUMBER: US 09/267,749	ADDRESSEE: ROBERTA L. ROBINS		
	EARLIER FILING DATE: 1999-03-10	STREET: 635 BRYANT STREET		
	SOFTWARE: PatentIn Ver. 2.0	CITY: PALO ALTO		
	SEQ ID NO 3	STATE: CALIFORNIA		
	LENGTH: 662	COUNTRY: UNITED STATES OF AMERICA		
	TYPE: PROT	ZIP: 94301		
	ORGANISM: Haemophilus somnus	COMPUTER READABLE FORM:		
	US/09-405-728-3	MEDIUM TYPE: Floppy disk		
	Query Match 22.2%	COMPUTER: IBM PC compatible		
	Best Local Similarity 32.5%	OPERATING SYSTEM: PC-DOS/MS-DOS		
	Matches 233; Conservative 99; Nismatches 249; Indels 136; Gaps 26;	SOFTWARE: PatentIn Release #1.0., Version #1.25		
Qy	58 NVNGGANGNTGNGNNGNANSGNSGKNEVSSIOEPAMGYAM 117	CURRENT APPLICATION DATA:		
Db	13 SVALISACSGKGFDLDDVETPQSSGSSRPTQDVPQGQRQEIVBEINSPALGYAT 72	APPLICATION NUMBER: US/07/961,522		
Qy	118 ELKLRNAAHPLNPNNKNEAKERKIALDQKD1LVAEGDLTNPFDKNU1IEYKKSSSEVVSKEE 177	FILING DATE: 1992/10/15		
Db	73 EIPRNISMPTGKTEKSNARVATAQQAPL----SFPMNSTKEDF1KRL----- 119	CLASSIFICATION: 435		
Qy	178 AQKGGSIENNTRLTHKDLSSEOKAEVKYKEALDNLNTOAQEKYKELIENDKSKDARNRD 237	ATTORNEY/AGENT INFORMATION:		
Db	120 -----IAENTK-----KNAFRGDRVYKFDIDDVLF----- 156	NAME: ROBINS, ROBERTA L.		
Qy	238 LEYTKSGFNVLTGSGTATD---HDCKTNTV---GYTGYALYKGSSTAKELPQTSAKYKGY 290	REGISTRATION NUMBER: 33,208		
Db	157 LQYRVG---YVLGTRPKLIEVSHDKTRDOPFAGVNGYFQGTSPTAVLPTQTVTYKGY 214	REFERENCE/DOCKET NUMBER: 9000-0015.20		
Qy	291 WDEFMTDA-----TLDNKYT-----DLPGIARQTOQWLSLVSTDEYATLTDKRNKPSDY 338	TELECOMMUNICATION INFORMATION:		
Db	2115 WDFYSDAFLNERTLAEFTQENNSATSNPG-----NQGATSNALV---NTRKVSGE 263	TELEPHONE: (415) 617-8999		
Qy	339 9GAYGHSSEFDVNFADKKTKGLISN---QLSGSPAVTAKERYKIEADTHGNRFRGSSATA 394	INFORMATION FOR SEQ ID NO: 4:		
Db	264 KINIAHSAEFTADFGSKKLGEKLNSGNTYSRRIENEQDVKTRYKIDAD1KGNRFRGSSATA 323	SEQUENCE CHARACTERISTICS:		
Qy	395 SDKAEDSKTQHPFTSDATHKLEGFTGPKGPEELAKGKLTDDNKUFLFGVEAKRDKV- EKT 452	LENGTH: 593 amino acids		
Db	324 QEKSHTI-----FGKDAKRLGEGFGPKABELACKFLTDNSUFLVFGAKRESKGDEKL 378	TYPE: AMINO ACID		
Qy	453 EAIIDAYAAGTFTNNTKATFTPFTKKQLDNFGNAAKVLIGSTVNLV---STDATRN 507	STRANDEDNESS: single		
Db	379 8TRPAVK1STDSN-----KLEKETMDFGNAYLLDGRQPLVPESNAGTTGAGN 430	TOPOLOGY: linear		
Qy	508 EFTKCKPTKDKRPTSAATNKAGETLMLNDEVVTKYGNFNEYLKFGELSGD----- 556	MOLECULE TYPE: Peptide		
Db	431 TGNRFB1STLDGSHLINKTHENHKKVTVCC--SNLTVTVKFG--SYGEGTTANDASNT 486	US-07-961-522-4		
Qy	557 ----SHS-----VELGERTATTGECAVPTGKAKVIGNW----VGYITGAGT 597			
	-----SHS-----VELGERTATTGECAVPTGKAKVIGNW----VGYITGAGT 597	Query Match 21.3%	Score 791; DB 1; Length 593;	
		Best Local Similarity 30.2%	Pred. No. 6.5-46; Mismatches 231; Indels 182; Gaps 27	
		Matches 224; Conservative 104;		
Qy	3 HIPLTLCKVIAISAVLITAAGCGSGGNNPAPTPIPMAGSAGNAGGTGNTGCTDNGVNA 62	3 HIPLTLCKVIAISAVLITAAGCGSGGNNPAPTPIPMAGSAGNAGGTGNTGCTDNGVNA 62		
Db	2 HFKLNPyALAFTSPLVAC-----SGGRGSF----- 28	2 HFKLNPyALAFTSPLVAC-----SGGRGSF----- 28		
Qy	63 GGANSGTGNAGNSGNANSGTGSANTPBPKQDVPDKNEKEQVSS1OEPANGYAMEBKLR 122	63 GGANSGTGNAGNSGNANSGTGSANTPBPKQDVPDKNEKEQVSS1OEPANGYAMEBKLR 122		
Db	29 -----LEDVRPNQTKAEEKATTSQDEEYKKTRFELDLMPEALGYETQILRR 77	29 -----LEDVRPNQTKAEEKATTSQDEEYKKTRFELDLMPEALGYETQILRR 77		
Qy	123 NAHPNPNPKNKEAEKRIALDQDKLIVAVEGDLTNIPFDKNL1EYLKKSSEVVSFKAQKGG 182	123 NAHPNPNPKNKEAEKRIALDQDKLIVAVEGDLTNIPFDKNL1EYLKKSSEVVSFKAQKGG 182		
Db	78 NKAPKETGEKRNEEVVLS-----DK-ITKLYQSEVEIPLHD----- 116	78 NKAPKETGEKRNEEVVLS-----DK-ITKLYQSEVEIPLHD----- 116		
Qy	183 IENNRLTHKDLSSEOKAEKVKAEALDNALTQAFQSKYKELIENAADKKSDARNRDLVEYK 242	183 IENNRLTHKDLSSEOKAEKVKAEALDNALTQAFQSKYKELIENAADKKSDARNRDLVEYK 242		

117 -ELNGKTTNSND-----
 Db 117 -VYHSHDSKRLDKNRDLKYVR 146
 Qy 243 SGFNTLGSYTAATDHDKTKTNRGGY-----
 Db 147 SGYVYDGSF----NEFRNDGSHFVKQGDGYVTLGTPSKELDKGKVSYKGTWDFV 202
 Qy 295 TDATLDNKYT--DLPGIAROTQWRSVLSTOBYATLTDKONKPSDYN-----AYGHSE 347
 Db 203 SNINLREIDFDTSDGKRNVSATSTET-----VNDRHKVGKGLGNEVKGVYAHSE 255
 Qy 348 FDVNFDKIKKGKLISNQ-----SGTAVTAKERYKIAIDHGNRFRSSATASDKAEDSKTQH 405
 Db 256 FAVIDFNKLUKGSLYRNGYINRNKAQEVTRKSYSTEADIAGNRFRPKAKA_EKAGD-----309
 Qy 406 PFTSDATNKLUGGFYCPKGEFLAKPLTDDNKLFGVFGAQRDKYK-KTEAIDAYALGTF 464
 Db 310 PIPTD-SNYLEGGFYCPKAEMAGKFPTNKSFLFAVFAASENGETTTERIIDATKI-----365
 Qy 465 NNTNTKATTFTPTKKKOLDNFGNNAKVLVGLGSTVNLVSTDATKNEBTKFKDKPSTSATNK 524
 Db 366 -----DLTQFNAKELNFGNFDASVLLIDGKIDLAGVNP-----K 399
 Qy 525 AGETLMNDEVIVK-TYGRNFEYLXKGEL-----SGVGDHSVYPLQGERTATGKAVP 576
 Db 400 NSKTVIEINGKTMVAVACCSNIEYMEFGQQLWQKEGKQVQD-NSFLQGERTAT--DKMP 455
 Qy 577 TTGKARYLGNWVGYLTGAGT-----GKSFNEAQDIAJDFIDFERKSVKGRKLTTQGRTDPV 631
 Db 456 AGGNYKXVGTWIDALVS-KGTNWIADANRNESGYRTEFDYNFSDKVNGKLFDFKGVNPNV 514
 Qy 632 FNIKGRIAGNGWTGKASTTAKADAGGYKIDS-SSTGKSVIENAEVTGGFYPGNANEMGSS 690
 Db 515 FTVDATGNGNFIGSAXTDS---GPAFDAGSSQHGNAVAFSDIKNGGYGPTAGBEGLQG 571
 Qy 691 FTHDDTDSKASVUVFGTKRQOE 711
 Db 572 FHHKSDNGSVGAVFGAKRQTE 592

RESULT 40
 Sequence 4, Application US/08217438
 Patent No. 5521072
 GENERAL INFORMATION:
 APPLICANT: Porter, Andrew A.
 APPLICANT: Gerlach, Gerald F.
 APPLICANT: Willison, Philip J.
 APPLICANT: Rossi-Campos, Amalia
 TITLE OF INVENTION: ACTINOBACILLUS PLEUROPNEUMONIAE
 NUMBER OF SEQUENCES: 11
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Reed & Robins
 STREET: 635 Bryant Street
 CITY: Palo Alto
 STATE: California
 COUNTRY: USA
 ZIP: 94301
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent In Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/217,438
 FILING DATE: 22-MAR-1994
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: Robins, Roberta L.
 REGISTRATION NUMBER: 33,208
 REFERENCE/DOCKET NUMBER: 9001-0015.01
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 415-617-8999

1 TELEFAX: 415-327-3231.
 1 TELEX:
 1 INFORMATION FOR SEQ ID NO: 4:
 1 SEQUENCE CHARACTERISTICS:
 1 LENGTH: 593 amino acids
 1 TYPE: single
 1 SPANDEDNESS: linear
 1 TOPOLOGY: linear
 1 US-08-217-438-4

Query Match 21.3%; Score 791; DB 1; Length 593;
 Best Local Similarity 30.2%; Pred. No. 6.5e-46;
 Matches 224; Conservative 104; Mi smatches 231; Indels 182; Gaps 27;
 Qy 3 HIPLITLCVAISAVULTACGGSGSNPPARTPINAGSAGNAGGTGNTGGTGSTDVGNA 62
 Qy 2 HFKLPNPAFLAPTSLLPVAC-----SGGKGSPFD-----28
 Db 63 GGANGSGTGNAGNSGNHANSCTGSANTPEPKYQDVTDKNEKEOVSIOEPMGYAMELKLK 122
 Qy 29 -----LEDYRPNQTAKEKATTSYQDEETKCKTKEBDLKLMEPALGYETQILRR 77
 Qy 123 NAHPNPNPKNKEAERIALDQKLWAVEGDLTNPFDRLNIEYLKKSSEVVKFPAQKGG 182
 Db 78 NKAPKTETGEKRNRVVESE-----DK-ITKLQYEVSEVIEPHLD-----116
 Qy 183 IENNTRLTHKDLSSEKEAKVKEALDNLTOFAQEKKYKELIENAHDKGSDARNRLEYVK 142
 Db 117 -ELNGKTTNSND-----VYHSHDSKRLDKNRDLKYVR 146
 Qy 243 SGENVLSGXYTATDHDKKTNYRGYY-----GALYKYGKSETAKELPOTSA-KYKGWYDFM 294
 Db 147 SGYVYDGSF----NEIRRNDSGFIVYFQKQGIDGYYVYLGPVSKPELPKGKVTSYKCTWDFV 202
 Qy 295 TDAIDLNDKYT--DLEGIAROTQWLSVSDEYATLTDKONKPSDYN-----AGHSS 347
 Db 203 SNINLREIDGFDTSGDGKRVNSATSET-----VNRDHKVGEKLGDNNEVKGYAHSS 255
 Qy 348 FDVNFDKIKKGKLISNQ-----SGTAVTAKERYKLEADHGNNRFRGSATASDKAEDSKTQH 405
 Db 256 FAVDDPNKLUKGSLYRNGYINRNKAQEVTRKSYSTEADIAGNRFRKAKA_EKAGD-----309
 Qy 406 PFTSDATNKLUGGFYGPKGKGEFLAKPLTDDNKLFGVFGAKRDKYK-KTEAIDAYALGTF 464
 Db 310 PFTD-SNYLEGGFYGPKAEMAGKFPTNKSFLFAVFAAKSGFTTTERIIDATKI-----365
 Qy 465 NNTNKATTFTPKQLDNFGNNAKVLGKLTGSLVNGYINRNKAQEVTRKSYSTEADIAGNRFRKAKA_EKAGD-----309
 Db 366 -----DLTQFNAKELNFGNFDASVLLIDGKIDLAGVNP-----K 399
 Qy 525 AGTUMVNDDEVIVK-TYGRNFEYLXKGEL-----SGVGDHSVYPLQGERTATGKAVP 576
 Db 515 FTVDATGNGNFIGSAXTDS---GPAFDAGSSQHGNAVAFSDIKNGGYGPTAGBEGLQG 571
 Qy 691 FTHDDTDSKASVUVFGTKRQOE 711
 Db 572 FHHKSDNGSVGAVFGAKRQTE 592

Search completed: February 23, 2005, 20:23:21
 Job time : 33.0976 secs

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OM protein - protein search, using sw model

Run on: February 23, 2005, 20:07:47 ; Search time 26.061 Seconds
(without alignments)

2039.451 Million Cell updates/sec

Title: US-09-673-133-4

Perfect score: 3709

Sequence: 1 MKHPLPTLCAISAVILTA.....DRDSSASVVFGRKQQEVKP 712

Scoring table: BLOSUM62

Gapopen: 10.0 , Gapext: 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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6: /cgn2_6/podata/1/iaa/backfile1.dep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result	No.	Score	Query	Match	Length	DB	ID	Description
1	3709	100.0		712	4	US-09-059-584-51		Sequence 51, App1
2	2594	69.9		709	4	US-08-778-570B-15*		Sequence 15, App1
3	2594	69.9		709	4	US-09-059-584-15		Sequence 2, App1
4	2569.5	69.3		707	2	US-08-749-941B-2		Sequence 16, App1
5	2497	67.3		689	4	US-08-778-570B-16*		Sequence 16, App1
6	2497	67.3		689	4	US-09-059-584-16		Sequence 16, App1
7	1929	52.0		713	4	US-09-059-584-53		Sequence 53, App1
8	1922	51.8		713	4	US-09-059-584-49		Sequence 49, App1
9	1884.5	50.8		706	4	US-09-059-584-46		Sequence 9, App1
10	1851.5	49.9		702	3	US-08-778-570B-12		Sequence 11, App1
11	1851.5	49.9		702	4	US-08-778-570B-11*		Sequence 11, App1
12	1851.5	49.9		702	4	US-09-059-584-11		Sequence 25, App1
13	1847.5	49.8		702	3	US-08-778-570B-15		Sequence 25, App1
14	1847.5	49.8		702	3	US-09-074-658-25		Sequence 10, App1
15	1754.5	47.3		682	4	US-08-613-009A-10		Sequence 12, App1
16	1754.5	47.3		682	4	US-08-778-570B-12		Sequence 12, App1
17	1754.5	47.3		682	4	US-09-059-584-12		Sequence 2388, App1
18	1088	29.3		416	4	US-08-540-236-238		Sequence 20, App1
19	950	25.6		601	3	US-08-513-009A-20		Sequence 26, App1
20	950	25.6		601	4	US-08-778-570B-26		Sequence 26, App1
21	950	25.6		601	4	US-09-059-584-26		Sequence 61, App1
22	942.5	25.4		578	3	US-08-448-194-61		Sequence 61, App1
23	942.5	25.4		578	3	US-08-867-921-61		Sequence 2, App1
24	937	25.3		599	3	US-08-448-194-61		Sequence 2, App1
25	937	25.3		599	3	US-08-867-921-2		Sequence 97, App1
26	931.5	25.1		598	1	US-08-487-990A-97		Sequence 97, App1
27	931.5	25.1		598	2	US-08-478-335-97		Sequence 97, App1

ALIGNMENTS

RESULT 1
US-09-584-51
; Sequence 51, Application US09059584

DNA

GENERAL INFORMATION:
; APPLICANT: Myers, Lisa E
; APPLICANT: Schreyers, Anthony B
; APPLICANT: Harkness, Robin E
; APPLICANT: Lossmore, Sheena M.
; APPLICANT: Du, Run-Pan
; APPLICANT: Tang, Yan-Ping
; APPLICANT: Klein, Michael H
; TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sim & McBurney
; STREET: 6th Floor, 330 University Avenue
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: MSG 1R7

COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/059/584
; FILING DATE: 14-APR-1998.
; CLASSIFICATION: 14-APR-1998.
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: US 08/778,570
; FILING DATE: 03-JAN-1997
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Stewart, Michael I
; REGISTRATION NUMBER: 24973
; REFERENCES/DOCKET NUMBER: 1038-794
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEPHONE: (416) 595-1163
; INFORMATION FOR SEQ ID NO: 51:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 712 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: Linear
; US-09-059-584-51

Query Match 100.0%; Score 3709; DB 4; Length 712;

Best Local Similarity 100.0%; Pred. No. 2.2e-259; Matches 712; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MKHPIPLTLCYTAISAVLTTAGGSGSNPPAPTPNAGAGNAGSGTGGAGSTDNAANA 60
 Db 1 MKHPIPLTLCYTAISAVLTTAGGSGSNPPAPTPNAGAGNAGSGTGGAGSTDNAANA 60

Qy 61 GSTGGASSGTSASTQPKVQDVPIDKNCDEVSQIOPAMPYGYVBLKRNWIPOEQER 120
 Db 61 GSTGGASSGTSASTQPKVQDVPIDKNCDEVSQIOPAMPYGYVBLKRNWIPOEQER 120

Qy 121 AKINTNDVVKLEGDLKHNPFDNSIWINNIKNSKEYTQVYNEBKONTENQIKKENKEKDKA 180
 Db 121 AKINTNDVVKLEGDLKHNPFDNSIWINNIKNSKEYTQVYNEBKONTENQIKKENKEKDKA 180

Qy 181 LKALTEKVLDDYLTSIAKPIYEKVNINDSHAKQNKARTTRDLYKVRSGYIYRSGYNSDICK 240
 Db 181 LKALTEKVLDDYLTSIAKPIYEKVNINDSHAKQNKARTTRDLYKVRSGYIYRSGYNSDICK 240

Qy 241 KIAKTFGDGFALFYKGTOAKLPSEVKYKGTTWDMTDAKKGQSSSFERRADRYSAM 300
 Db 241 KIAKTFGDGFALFYKGTOAKLPSEVKYKGTTWDMTDAKKGQSSSFERRADRYSAM 300

Qy 301 SHEYPSLTDQDKNPDNYDNEGHSSSEFTYDFSKSLSLGGFNSNLQDHKGKVTKTKRYD 360
 Db 301 SHEYPSLTDQDKNPDNYDNEGHSSSEFTYDFSKSLSLGGFNSNLQDHKGKVTKTKRYD 360

Qy 361 INARTHGNRFGSATAINKONESAKHHPFTSDADNRLEGFSYGPNAEELAGKELTDDNKL 420
 Db 361 INARTHGNRFGSATAINKONESAKHHPFTSDADNRLEGFSYGPNAEELAGKELTDDNKL 420

Qy 421 FGVFGAKQESAKETEAII DAYALGTFNKGCTTNAFTANSKCEDLNFGNINKLVLGSTV 480
 Db 421 FGVFGAKQESAKETEAII DAYALGTFNKGCTTNAFTANSKCEDLNFGNINKLVLGSTV 480

Qy 481 IDLTQGNDFVTKIDKEKPATTINQAGEPELTNDKVRVQCCSNLEHLKRGSLSIGDSNV 540
 Db 481 IDLTQGNDFVTKIDKEKPATTINQAGEPELTNDKVRVQCCSNLEHLKRGSLSIGDSNV 540

Qy 541 FLQGERTATGDKDQKAMPVAGNAKYRGTRWGYVASSGNTSKAYEAQQFDANNAEFDYD 600
 Db 541 FLQGERTATGDKDQKAMPVAGNAKYRGTRWGYVASSGNTSKAYEAQQFDANNAEFDYD 600

Qy 601 FANKSLTGKLIPNTSSDGKSADPITATIDNGFSGKANTPDIETGLKLDKSNKSESGYI 660
 Db 601 FANKSLTGKLIPNTSSDGKSADPITATIDNGFSGKANTPDIETGLKLDKSNKSESGYI 660

Qy 661 VKDIAVIGGYFQDQANEGLGSFTYKSNDAGNQDKDSSASVVFGARKQOEYKPV 712
 Db 661 VKDIAVIGGYFQDQANEGLGSFTYKSNDAGNQDKDSSASVVFGARKQOEYKPV 712

RESULT 2
 US-08-778-570B-15
 Sequence 15, Application US/08778570B
 Parent No. 6137096
 GENERAL INFORMATION:
 APPLICANT: Myers, Lisa E.
 APPLICANT: Schryvers, Anthony B.
 APPLICANT: Hartness, Robin E.
 APPLICANT: Loosmore, Sheena M.
 APPLICANT: Du, Run-Pan
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Klein, Michel H.
 TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella
 NUMBER OF SEQUENCES: 43
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Sim & McBurney
 STREET: 6th Floor, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: M5G 1R7

COMPUTER READABLE FORM:
 COMPUTER: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.3.0
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/778,570B
 CLASSIFICATION: 536
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I.
 REGISTRATION NUMBER: 24973
 REFERENCE/DOCKET NUMBER: 1038-6-64
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1167
 INFORMATION FOR SEQ ID NO: 15:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 709 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-778-570B-15

Query	Match	Score	DB	Length
Qy	69 9%; Score 2594; Pred. NO. 7e-19; Mi smatches 92; Indels 58; Gaps 18; Matches 535; Conservative 54;	72 4%;	4;	709;
Qy	1 MCKHPIPLTLCVIAISAVLTTAGGSGSNPPAPTPNAGAGNAGSGTGGAGSTDNAANA 60	1 MCKHPIPLTLCVIAISAVLTTAGGSGSNPPAPTPNAGAGNAGSGTGGAGSTDNAANA 60	54;	54;
Db	1 MCKHPIPLTLCVIAISAVLTTAGGSGSNPPAPTPNAGAGNAGSGTGGAGSTDNAANA 60	1 MCKHPIPLTLCVIAISAVLTTAGGSGSNPPAPTPNAGAGNAGSGTGGAGSTDNAANA 60	54;	54;
Qy	55 DNAANAGSTGGSAGSGTGSASTTQPKYDQVETDKRKDDEVSQIOPAMPYGYVELKRNWIP 114	55 DNAANAGSTGGSAGSGTGSASTTQPKYDQVETDKRKDDEVSQIOPAMPYGYVELKRNWIP 114	54;	54;
Db	60 -GAGNAGTGTGANSAGSAGSASTPEPKYDQVETDKRKDDEVSQIOPAMPYGYVELKRNWIP 118	60 -GAGNAGTGTGANSAGSAGSASTPEPKYDQVETDKRKDDEVSQIOPAMPYGYVELKRNWIP 118	54;	54;
Qy	115 QEQEPHAKINTNDVVKLEGDLKINPKFDNSIWONIKNSEKVTQYNNQEKENIENQIKKENK 174	115 QEQEPHAKINTNDVVKLEGDLKINPKFDNSIWONIKNSEKVTQYNNQEKENIENQIKKENK 174	54;	54;
Db	119 QEQEPHAKINTNDVVKLEGDLKINPKFDNSIWONIKNSEKVTQYNNQEKENIENQIKKENK 174	119 QEQEPHAKINTNDVVKLEGDLKINPKFDNSIWONIKNSEKVTQYNNQEKENIENQIKKENK 174	54;	54;
Qy	175 B----LDKTLAKALIEKVLDYLTSIPLAPIYKNNINDSHDKQNKARTTRDLYKVRSGYI 229	175 B----LDKTLAKALIEKVLDYLTSIPLAPIYKNNINDSHDKQNKARTTRDLYKVRSGYI 229	54;	54;
Db	179 QRPDKKLDDVALQAYIEKVLDYLTSIPLAPIYKNNINDSHDKQNKARTTRDLYKVRSGYI 238	179 QRPDKKLDDVALQAYIEKVLDYLTSIPLAPIYKNNINDSHDKQNKARTTRDLYKVRSGYI 238	54;	54;
Qy	230 RSGYSNIDIOKCIKARTGFDCALFYKGTOTAKOLPVSEVYKGTIDFTDAKKGQFSSF -	230 RSGYSNIDIOKCIKARTGFDCALFYKGTOTAKOLPVSEVYKGTIDFTDAKKGQFSSF -	54;	54;
Db	239 RSGSN -IPRKIANTGFDALYFQGTQPAQLPSQVYKGTIDFTDAKKGQFSSFG 297	239 RSGSN -IPRKIANTGFDALYFQGTQPAQLPSQVYKGTIDFTDAKKGQFSSFG 297	54;	54;
Qy	289 --ERAGDRYSAMSSHEYPSLTDIDKPKDNYDVEGHSSSEFTVDFSKKSLTGGFSPNLIQ 346	289 --ERAGDRYSAMSSHEYPSLTDIDKPKDNYDVEGHSSSEFTVDFSKKSLTGGFSPNLIQ 346	54;	54;
Db	298 TSQRLAGDRYSAMSSHEYPSLTDIDKPKDNYDVEGHSSSEFTVDFSKKSLTGGFSPNLIQ 357	298 TSQRLAGDRYSAMSSHEYPSLTDIDKPKDNYDVEGHSSSEFTVDFSKKSLTGGFSPNLIQ 357	54;	54;
Qy	347 DHHKCKVTKTKYDINARLHGNNRFRGSATAINRDNEKAKHPPFTSDADNRLEGFFYGPNA 406	347 DHHKCKVTKTKYDINARLHGNNRFRGSATAINRDNEKAKHPPFTSDADNRLEGFFYGPNA 406	54;	54;
Db	358 DGHKRCVSNTKTKYDIDNTYGNRFRGSATADSTTEASKSKHPPFTSDAKNSLEGGFYGPNA 417	358 DGHKRCVSNTKTKYDIDNTYGNRFRGSATADSTTEASKSKHPPFTSDAKNSLEGGFYGPNA 417	54;	54;
Qy	407 EELAGKFLTDNKLQGFVFGAKQESPAKE-TEAII DAYALGTFNKGCTTNAFTANSKCKEL 477	407 EELAGKFLTDNKLQGFVFGAKQESPAKE-TEAII DAYALGTFNKGCTTNAFTANSKCKEL 477	54;	54;
Db	418 EELAGKFLTDNKLQGFVFGAKQESPAKE-TEAII DAYALGTFNKGCTTNAFTANSKCKEL 477	418 EELAGKFLTDNKLQGFVFGAKQESPAKE-TEAII DAYALGTFNKGCTTNAFTANSKCKEL 477	54;	54;
Qy	466 DNFGNINKLVLGSTVIDL -QNDDFVKTIDKEKPATTINQAGEPELTNDKVRVQYQ 519	466 DNFGNINKLVLGSTVIDL -QNDDFVKTIDKEKPATTINQAGEPELTNDKVRVQYQ 519	54;	54;
Db	478 DNFGNAKCLVLGSTVIDLQVFTGATKDNEP -KEKPSATNRAGETUMVNDIVKRT 532	478 DNFGNAKCLVLGSTVIDLQVFTGATKDNEP -KEKPSATNRAGETUMVNDIVKRT 532	54;	54;
Qy	520 --CCCNLEHILKFGSISIGDSNSVPLQGERTATKDKDAMPVAGNAKYRGTWAGVAGSG 577	520 --CCCNLEHILKFGSISIGDSNSVPLQGERTATKDKDAMPVAGNAKYRGTWAGVAGSG 577	54;	54;
Db	533 YGYGRNFEEYKLKFGSISIGSSHSHSVPLQGERTA---EVAPVTEGATYLGNNWGYITGKD 587	533 YGYGRNFEEYKLKFGSISIGSSHSHSVPLQGERTA---EVAPVTEGATYLGNNWGYITGKD 587	54;	54;
Qy	578 ---NTSKAY-EAQQFDANNAEFDVFDPAKSLSTQKLIDVPTQGKLTQGRDQ- -PVNNTGQIAGNG 633	578 ---NTSKAY-EAQQFDANNAEFDVFDPAKSLSTQKLIDVPTQGKLTQGRDQ- -PVNNTGQIAGNG 633	54;	54;
Db	588 TGTSTGKSFNEBAQDIAD----FEDIFERKSVKGKLTQGRDQ- -	588 TGTSTGKSFNEBAQDIAD----FEDIFERKSVKGKLTQGRDQ- -	54;	54;
Qy	634 SGKANTPDIETGGILKIDSXNSESGR-VIYKDAYIYGGFYGPQANEGLGGSFTYKSNDAGNQ 692	634 SGKANTPDIETGGILKIDSXNSESGR-VIYKDAYIYGGFYGPQANEGLGGSFTYKSNDAGNQ 692	54;	54;

TELEFAX: (716) 849-0349
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 707 residues
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 DESCRIPTION: protein
 HYPOTHETICAL: yes
 US-08-949-941B-2

Query Match 69.3%; Score 2569.5; DB 2; Length 707;
 Best Local Similarity 71.6%; Pred. No. 4.1e-177;
 Matches 515; Conservative 68; Mismatches 115; Indels 21; Gaps 9;

1 MKHPIPLTLCVTAISAVLTTACGGSGSNPPAPTPNAGGAGNAGSGTGGAGTAAANA 60
 1 MKHPIPLTLCVTAISAVLTTACGGSGSNPPAPTPNAGSNGTAAANA 59

Qy 61 GSTGGASSGTGSSASTQKPKYQDVPTDKKKDEVSGIOPERAMYGYVBLKLRNWP---QE 116
 60 GNTGGTSSGTGSSASTSEPKYQDVPTPNKCEQVSSIQEPAMGYANELKLRNAPHNPK 119

Db 117 QBEHAKINTINDVYKLEGDLKRNPFDSIWQNIKNSKEVTPVYNEQKONIENQIKKENEL 176
 120 TEKRIALDQDLVAVENGLTNIPFDKMLIEYIKSPPEVSKFNEQXGGIENNTRLTHKD 179

Qy 177 DKTALKALKINTINDVYKLEGDLKRNPFDSIWQNIKNSKEVTPVYNEQKONIENQIKKENEL 236
 180 SSEQKEAKVKEALDN ---AQEKYKELIENAHDKGSdARNRDLKVKSGNLYLSSGTYAT 234

Qy 237 DIQKKTAKTGFDFGALFYKGTOAKQLPVSEYKKGTDWMDTDAKGQSFSSE - RRAGD 294
 238 DHDKKTNYRGYGA LYKGSEPTAKELPOTSAKYKGWDFMTDATUDNKYTDLPGTAROQ 294

Qy 295 RYSAMSSHEYPSLTLTDKNNKDNDYDGHASEPTVDFSKSLTQGLFSNLQDHHKGK-V 353
 295 WRSLVSTDEATLTDKNNKDNDYDGHASSEPDYNEADKVKTKLISN--QLSGKTY 351

Db 354 TKT KRDINA THG NRFRG S A T A N K D N E S A K H P T S D A D N R L E G G F Y C P N A E L L A G K F 413
 352 TAKERYKIBADTHGNEFRG S A I A S E K T D E S K S K H P P T S D A K D R L E G G F Y G P K G E E L A G K F 411

Qy 414 LTDDNKLFGVYGAOKSEAKS-TEA1DAYALGTFNKSGTINPARTANSKELDNFGNIN 472
 412 LTDDNKLFGVYGAOKSEAKS-TEA1DAYALGTFNKSGTINPARTANSKELDNFGNIN 471

Db 473 KLVLGSTV1D1TQGNDFVKTIDKEPKATTINQAGPBLTNDKVRVQVCCSNLEHULKFGSL 532
 472 KLVLGSTV1D1TQGNDFVKTIDKEPKATTINQAGPBLTNDKVRVQVCCSNLEHULKFGSL 531

Qy 533 SIGDSNSVFLQGERTATKGDKDAMPVAGNARYKGWAGVAGSNTISRAYEAQOFADNA 592
 532 SIGDSNSVFLQGERTATGG - DKAMPVUGNARYKGWAGVAGSNTISRAYEAQOFADNA 589

Db 593 NRAEFDVDFANKSLTGKLIPNTSSDGSKAFTDITADNGFSCKRANTPDIETGGLKIDSK 652
 590 NRAEFDVDFANKSLTGKLIPNTSSDGSKAFTDITADNGFSCKRANTPDIETGGLKIDSK 649

Qy 653 NSESGRVIVKDAV1VGGYFGQANEIJJGSPYKNSDAGNODKDSASAVVFGARKQEVK 711
 650 NTESGRVIVKDAV1VGGYFGQANEIJJGSPYKNSDAGNODKDSASAVVFGARKQEVK 706

RESULT 5
 US-08-778-570B-16
 1 Sequence 1.6, Application US/08778570B
 1 GENERAL INFORMATION:
 1 APPLICANT: Myers, Lisa E
 1 APPLICANT: Schryvers, Anthony B
 1 APPLICANT: Harkness, Robin E
 1 APPLICANT: Loosmore, Sheena M.

APPLICANT: Du, Run-Pan
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Klein, Michel H
 TITLE OF INVENTION: Transferrin Receptor Genes of *Moraxella*
 NUMBER OF SEQUENCES: 43
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Sim & McBurney
 STREET: 6th Floor, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: M5G 1R7
 COMPUTER READABLE FORM:
 COMPUTER: IBM PC compatible
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/778,570B
 FILING DATE: 03-JAN-1997
 CLASSIFICATION: 536
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24973
 REFERENCE/DOCKET NUMBER: 1038-664
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 16:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 689 amino acids
 TYPE: amino acid
 STRANDBEADNESS: single
 TOPOLOGY: linear
 US-08-778-570B-16

Query Match 67.3%; Score 2497; DB 4; Length 689;
 Best Local Similarity 71.6%; Pred. No. 6.8e-172;
 Matches 515; Conservative 54; Mismatches 92; Indels 58; Gaps 18;

Qy 21 CGG-SCGSNPAPPAPTPNAGGAGNAGS---GTCGAGGSTDNAANAGSTGGASSGTGSAS 74
 1 CGGSSGENPASTIPNAGNSGNAGNAGGTTGANS -GAGAGGTGANSAGSAS 58

Db 75 TQKPKYQDVPTDKKKDEVSGIOPERAMYGYVBLKLRNWPQEAEHAKINTNDVYKLEGD 134
 59 TPEPKYKDVPTDKKKDEVSGIOPERAMYGYVBLKLRNWPQEAEHAKINTNDVYKLEGD 118

Qy 135 LKHNPFDNSIWNQINNSKEYVTVNQEKONIENQIKKENEL---LDKTKALKJTEKVL 189
 119 LKHNPFDNSIWNQINNSKEYVTVNQEKONIENQIKKENEL---LDKTKALKJTEKVL 178

Db 190 DDYLTSLAKPDIYEKINNDSHDKONKARTDRDLYKTYSGYIYRGYSNIDIOKKIATGFDG 249
 179 DDRLTBLAKPDIYEKINNDSHDKONKARTDRDLYKTYSGYIYRGYSNIDIOKKIATGFDG 237

Qy 250 ALFYKGQTAKOLPVSVEVKYGTWFMTDKKGQFSSF--ERAGDRYSAMSSHEYPS 306
 238 ALFYKGQTAKOLPVSQVKYGTWFMTDKKGQFSSFQTOSRLAGDRYSAMSSHEYPS 297

Db 307 LLTDPDKNPDPYDNGEYGHSSSEFTVDFSKSLKGEISSLNODGHKSVNKTKEYD,DANIY 366
 298 LLTDPDKNPDPYDNGEYGHSSSEFTVDFSKSLKGEISSLNODGHKSVNKTKEYD,DANIY 357

Qy 367 GNRFRGSSATA1NKDNESSAKHPTFTSDADNRLEGGYGPNAEFLAGKFLTDNNKLFGVFGA 426
 358 GNRFRGSSATA1SDTTSKSHPTFTDANSLEGGYGPNAEFLAGKFLTDNNKLFGVFGA 417

Qy 427 KQESERAKE - TEA1DAYALGTFNKSGTINPARTANSKELDNFGNINRASH 366
 Db 418 KRESSBAKE TEA1DAYALGTFNKSGTINPARTANSKELDNFGNIAKLVLGSTVTDLVL 477

Qy 485 ----QGNDFVKTIDREKPKATTNGAGEPLTVNDKVRVQV - CCCNLEHLKFGSLSIGDS 537

75 TQKPKYQDVPTDKKKDEVSQIOPQEMGYVELKURNWIPQESEHAKINTNDVVKLEGD 134
 59 TPEPKYKDVPDNEKAEVSGIOPQEMGYVELKURNWIPQESEHAKINTNDVVKLEGD 118

Db 478 TGATKDNEF ----KEPKSATNKAGETLWVNDDEVTKTYGYGRNFYLFKGELSIGGS 532
 Qy 538 NSVFLQGERTATKGDKAMPAGNARYGTRWAGYIAGSG --NTSKA -BAQQPADNAN 593
 Db 533 HSVFLQGERTA ----EKAVPTEGTAKYLGNGWGTITGGDTGTSCKSNEAQDAD-- 584
 Qy 594 RAEFDVDFANSKLTGKLIPNTSSDGKSAFDITATDGNGFSGKANTPDIEGGLKIDSKN 653
 Db 595 ---FDDEPFRSVKGULTQCRD - PVENTGQIAGNGWGTGTASTAKANGGYKIDS - 637
 Qy 654 SESGR -VIKDAIVTGGFYGPOANEIIGGSFTYKSNDAGNODKDSSASVFGARKQCEVK 711
 Db 638 SSTGKSVIENAKVTEGFGYGPNAENGGSFTHDID ---DSKASVFGTKRQEEVK 689

RESULT 6
 US-09-059-584-16
 ; Sequence 16, Application US/09059584
 ; Patent No. 6440701
 ; GENERAL INFORMATION:
 ; APPLICANT: Myers, Lisa E
 ; Schryvers, Anthony B
 ; Harkness, Robin E
 ; Loosmore, Sheena M.
 ; APPLICANT: Du, Run-Pan
 ; APPLICANT: Yang, Yan-Ping
 ; APPLICANT: Klein, Michel H
 ; TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella
 ; NUMBER OF SEQUENCES: 60
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEES: Sim & McBurney
 ; STREET: 6th Floor, 330 University Avenue
 ; CITY: Toronto
 ; STATE: Ontario
 ; COUNTRY: Canada
 ; ZIP: M5G 1R7
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy diskable
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent In Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/059,584
 ; FILING DATE: 14-APR-1998
 ; CLASSIFICATION:
 ; PRIORITY APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/778,570
 ; FILING DATE: 03-JAN-1997
 ; CLASSIFICATION:
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Stewart, Michael I
 ; REGISTRATION NUMBER: 24973
 ; REFERENCE/DOCKET NUMBER: 1038-794
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (416) 595-1155
 ; TELEFAX: (416) 595-1163
 ; INFORMATION FOR SEQ ID NO: 16:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 689 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; US-09-059-584-16

Qy Db 75 TQKPKYQDVPTDKKKDEVSQIOPQEMGYVELKURNWIPQESEHAKINTNDVVKLEGD 134
 Qy Db 59 TPEPKYKDVPDNEKAEVSGIOPQEMGYVELKURNWIPQESEHAKINTNDVVKLEGD 118
 Qy Db 135 LKHNPDNSIWNQINNSKEYOTVNWQEKONTENQIKKENKE---LDKTALKALIEKVL 189
 Qy Db 119 LKHNPDNSIWNQINNSKEYOTVNEQKNTEDQKGRENKORPDKLLDVALQATIEKVL 178
 Qy Db 190 DDYTLSLAKPIYEKINNDSHDKONKARTDRDLYKUVSGYIYRSQYSNIDIQKIAKTGFDG 249
 Qy Db 179 DDRLTBLAKPIYEKINNSHKONKARTDRDLYKUVSGYIYRSQYNT - IPKIAKTGFDG 237
 Qy Db 250 ALFYGTQATOKPNSEVRYKGWTDFMTDAKKGQFSSF -- ERAGDRYMSMSHYPES 306
 Qy Db 238 ALFYGTQATOKPNSQVKYKGWTDFMTDAKKGQFSSFCTSQRLAGRYSMSHYPES 297
 Qy Db 307 LLTDDENKPKDNYDNGHSSBFTVDFSKSLTGGFLFSNLQDHKGKVTKTKYRDINARIH 366
 Qy Db 298 LLTDEENKPKDNYDNGHSSBFTVDFSKSLKGEISSNQIGHKGCSVNKTKRYDDANIY 357
 Qy Db 367 GNRFRGSSATAIKNQINNSKAKHPTFTSDADNRLLEGFGYGPNAELACKFLTDNNKLFGVFGA 426
 Qy Db 358 GNRFRGSSATAIKNQINNSKAKHPTFTSDADNRLLEGFGYGPNAELACKFLTDNNKLFGVFGA 417
 Qy Db 427 KQESAKE -TEAII DAY ALGTENKSGTTNPAFTANSKKELDNFNGNINKVLGSTVTDLT- 484
 Qy Db 418 KRESAKEKE TEAII DAY ALGTENKSGTTNPAFTANSKKELDNFNGNIAKVLVLGSTVTDLVP 477
 Qy Db 485 ----QGNDPFVKTIDKEKPATTNGAGEPLTVNDVTRVQV --CCSNLEHJKFGSLSIGGS 537
 Qy Db 478 TGATKDNEF ---KEKPKSATNAKAGEGETLWVNDEVTKTYGYGRNFYELKGESLSIGGS 532
 Qy Db 538 NSVFLQGERTATKGDKDAMPVAGNAYKRGTRWAGYVAGSG --NTSKAY -EAQOPADNAN 593
 Qy Db 533 HSVFLQGERTA ---EKAVPTEGTAKYLGNGWGTGKTSFNAQDAD--- 584
 Qy Db 594 RAEFDVDFANSLTLGKLIPNTSSDQKSAPDITATDGNGPSKQKANTPDIETGGKLKIDSKN 653
 Qy Db 585 ---FDDEPFRSVKGSKLTTQGRD --PVFNNTGQLAGNGWTGTASTAKANGGYKIDS-- 637
 Qy Db 654 SESGR -VIVKDAIVTGGFYGPOANEIIGGSFTYKSNDAGNODKDSSASVFGARKQCEVK 711
 Qy Db 638 SSTGKSVIENAKVTEGFGYGPNAENGGSFTHDID ---DSKASVFGTKRQEEVK 689

RESULT 7
 US-09-059-584-53
 ; Sequence 53, Application US/09059584
 ; Patent No. 6440701
 ; GENERAL INFORMATION:
 ; APPLICANT: Myers, Lisa E
 ; Schryvers, Anthony B
 ; Harkness, Robin E
 ; Loosmore, Sheena M.
 ; APPLICANT: Du, Run-Pan
 ; APPLICANT: Yang, Yan-Ping
 ; APPLICANT: Klein, Michel H
 ; TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella
 ; NUMBER OF SEQUENCES: 60
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEES: Sim & McBurney
 ; STREET: 6th Floor, 330 University Avenue
 ; CITY: Toronto
 ; STATE: Ontario
 ; COUNTRY: Canada
 ; ZIP: MSG 1R7
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent In Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/059,584

FILING DATE: 14-APR-1998
 CLASSIFICATION:
 PRIOR APPLICATION DATA:
 FILING DATE: 03-JAN-1997
 CLASSIFICATION:
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24973
 REFERENCE/DOCKET NUMBER: 1038-794
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 53:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 713 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-09-059-584-53

Query Match 52.0% Score 1929; DB 4; Length 713;
 Best Local Similarity 54.5%; Pred. No. 7.3e-131;
 Matches 402; Conservative 180; Indels 52; Gaps 15;

Query 1 MKHPIPTTLCAISAVLTTAGGGCSNPPAPTPIPNAGAGNAG--SGTGGASSTDN-- 56
 Db 1 MKHPIPTTLCAISAVLTTAGGGCSNPPAPTPIPNAGAGNAG--SGTGGASSTDN-- 56
 Query 57 -----AAGAGSTGAGSSGTGASTATQPKPQDVTPTDKNRKEVSGIOPBAMGYGVBLK 108
 Db 61 NAGGANSGTGNAGNSGNAGSGTGSANTPEPKYDVTPTDKNKEQVQSISSPAMGYAMELK 120
 Query 109 LRNWIP-----QEDEHAKINTNDVYKLESDLKINPFDNSIWIQNIKNSKEVOTYVYQEK 162
 Db 121 LRNAHPLNPNNKNEAEKRAIDQDVLVAEVDLTPIDKLNLIETLKQSSSEVSKPEAQK 180
 Query 163 QNIENQIKKENKELDKTALKLIERVLDYLTSLAKPIYEKNINNDSHKONKARTDLYK 222
 Db 181 GGIENNTRLTHKDLSSEBQEAKVKEAIDQKDNRDLEY 240
 Query 223 VRSGYTYRSGYSNIDIQKIAKTAGKTFDGAFLFYKGQTQAKLQFVSEVYKGTFWDFMTDAKG 282
 Db 241 VKSGFNYLSGTYTADHDKTKNTRYGYGALYKGSETAKELPQTSAKYKGTFWDFMTDAKD 300
 Query 283 QSFSSPE--RRAQDRSRTSAMSSHEYPELITTDKNDKEDNYDEYGHSESEFTVDFSKSKSLTGG 340
 Db 301 NRYTDLPGIAQTQWNSLVSDEATLTDRDNKNSDGYAGYGHSEDFVNFDADEKIKGK 360
 Query 341 LFSNLQDHKGKVTKTKYDINARHGNRFRGSAIAKDNESAKAHDSTQKHPFTSDADNRLEGG 400
 Db 361 L1SN--QLSGTAVTAKERKYLEADTHGNRFRGSAIASDRAEDSKTQKHPFTSDATNKELEGG 418
 Query 401 FYGPNAEELACKFLFTDDNKLFGVFGAKQESAKETEAIIDAYALGTFENSGTTNPA--FT 458
 Db 419 FYGPKGEBELACKFLFTDDNKLFGVFGAKRDK-VKTEAIDAYALGTFN--NTNKATTFT 474

Query Match 51.8% Score 1922; DB 4; Length 713;
 Best Local Similarity 55.8%; Pred. No. 2.4e-130;
 Matches 411; Conservative 96; Mismatches 181; Indels 48; Gaps 21;

Query 459 ANSKKELDNFENKINLKVLSPTVDTQ--GNDFVKTUKKEKPTTNGAEPLTVNDR 514
 Db 475 PFTKQDNLNFENKACLUVLSPTVNLVYSTDAKTFNEFTKFTKDPPTSATNKAGETLVMNDE 534

Query 515 VRVQVCCSNLEHLKFESSLISGDSNSVPLQGERTATGDKDOKAMPYAGNAYKRTWAGYA 574
 Db 535 VIVKTYKGKNFYLLKFESSLISGDSNSVPLQGERTATG--EKAVPITGKAYLGNWGYLT 592

Query 575 GSGNTSKAYEAQOFADNARABFDYDFANKSLTGLPNTSSDGSASFDTATIDGNGFS 634
 Db 593 GAGTGSFNEAQDIAD----FDIDFERSKVKGLTITQGRFTD--PVENIKGEIAGNGWT 644

Query 635 GKAATPDIETGGLKIDSKNSNSGR--VIVKODAIVGFFYGPQANEFLGGSFYTKNSNDAGNQD 693
 Db 645 GRSITKADAGGYKIDS--SSIGKSVIVENAEVIGGFYGPANENGSTHDID----696

Query 694 KDSSASVVFGARKKQOEVK 711
 Db 697 -DSKSVVFFTKRQEVK 713

RESULT 8
 US-09-059-584-49
 ; Sequence 49, Application US/09059584
 ; Patent No. 6440701
 ; GENERAL INFORMATION:
 ; APPLICANT: Myers, Lisa E
 ; APPLICANT: Schryvers, Anthony B
 ; APPLICANT: Harkness, Robin E
 ; APPLICANT: Loosmore, Sheena M.
 ; APPLICANT: Du, Run-Pan
 ; APPLICANT: Yang, Yan-Ping
 ; APPLICANT: Klein, Michael H
 ; TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella
 ; NUMBER OF SEQUENCES: 60
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Sim & McBurney
 ; STREET: 6th Floor, 330 University Avenue
 ; CITY: Toronto
 ; STATE: Ontario
 ; COUNTRY: Canada
 ; ZIP: M5G 1R7
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/059-584
 ; FILING DATE: 14-APR-1998
 ; CLASSIFICATION:
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/778,570
 ; FILING DATE: 03-JAN-1997
 ; CLASSIFICATION:
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Stewart, Michael I
 ; REGISTRATION NUMBER: 24973
 ; REFERENCE/DOCKET NUMBER: 1038-794
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (416) 595-1155
 ; TELEFAX: (416) 595-1163
 ; INFORMATION FOR SEQ ID NO: 49:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 713 amino acids
 ; TYPE: amino acid
 ; TOPOLOGY: linear
 ; US-09-059-584-49

Query Match 51.8% Score 1922; DB 4; Length 713;
 Best Local Similarity 55.8%; Pred. No. 2.4e-130;
 Matches 411; Conservative 96; Mismatches 181; Indels 48; Gaps 21;

Query 1 MKHPIPTTLCAISAVLTTAGGGCSNPPAPTPIPNAGAGNAG--SGTGGASSTDN-- 60
 Db 1 MKHPIPTTLCAISAVLTTAGGGCSNPPAPTPIPNAGAGNAG--SGTGGASSTDN-- 60
 Query 61 GSTGASSGSGTGSASTQPKYDVPPTDKNKDEVSQIOPBAMGYGVBLK 120
 Db 1 MKHPIPTTLCAISAVLTTAGGGCSNPPAPTPIPNAGAGNAG--SGTGGASSTDN-- 59
 Query 121 AKINTNDVVLLEG----DLKHNPDNSIWQNIKN--SKEVQTVYNEQKONIENQIKKE 172
 Db 117 TPLDKNIIITLDGKQVADNQKSPFLPSL--DVENKLKDGYIAKNEADKNAIGRIKRE 174

Query 173 NKELDKTALKALIEVKYLDYLTSLAKPIYEKNINNDSHKONKARTDLYK 600
 Db 175 NEQNKRKISDEBLAKIKENVRKS--PEFOQVLSISAKTFHSNNKTATRDKYVDR 231

RESULT 9
 US-09-059-584-46
 Sequence 46, Application US/090595984
 Patent No. 6440701
 GENERAL INFORMATION:
 APPLICANT: Myers, Lisa E
 APPLICANT: Schryvers, Anthony B
 APPLICANT: Harkness, Robin E
 APPLICANT: Loosmore, Sheena M.
 APPLICANT: Du, Run-Pan
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Klein, Michel H
 TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella
 NUMBER OF SEQUENCES: 60
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Sim & McBurney
 STREET: 6th Floor, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: MSG 1R7
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent In Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US 09/059,584
 FILING DATE: 14-APR-1998
 CLASSIFICATION:
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US 08/778,570
 FILING DATE: 03-JAN-1997
 CLASSIFICATION:
 ATTORNEY/AGENT INFORMATION:
 Name: Stewart, Michael I

REGISTRATION NUMBER: 24973
 REFERENCE/DOCKET NUMBER: 1038-794
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 46:
 SEQ ID NO: 46
 LENGTH: 706 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 US-09-059-584-46

Query Match 50.8%; Score 1884.5; DB 4; Length 706;
 Best Local Similarity 55.8%; Pred. No. 1.2e-127;
 Matches 88; Mismatches 178; Index 61; Gaps 22;

Query 1 MCHIPLTLTLCVAVSLLTACGGGGSNNPAPTPNAGGAGAGSGTGAGAGTAAANA 60
 Query 1 MCHIPLTLTLCVAVSLLTACGGGGSNNPAPTPNAGGAGAGSGTGAGAGTAAANA 59

Query 61 GSTGGASSCTGSASTOKPKYDVTDKRKDEVSGLQEPAMGYSVELKLRNWIQEQQEEH 120
 Query 60 GNTGCTNSCTGSANTPEPKYDVTDKRKDEVSGLQEPAMGYSMALSKRN--LHKQOQD 116

Query 121 AKINTNDVVKLE-----GDLKRNPFDSIWQNLNSKEVQTYNQEKONIENQIKKEN 173
 Query 117 TPLDEKDTLDGKQVAKGEKSPLPFLSDV-ENKLQDGYIAKNEADKNAIGRKIKDN 175

Query 174 KELDKTALKALIEKVLD-----YLTSLAKPIEKVNINDHDKONKARTDLKTV 223
 Query 176 K--DLSLSKAELAKOIKEDVRKSHFQQVLSSLKKKIFHSN---DGTTKATTRLQIV 228

Query 224 RSGTYRSGYSNTD1Q-KKIAKTFGDFGALFYKCTOTAKOLPVSE-VKYKGTDWDFMTD-AK 280
 Query 229 DYGTYLNDGNYLTVKTDLWNLGPVGGFYNGTTAKELPLTDQAVKYGHWMDMTDVAK 288

Query 281 KGQSESSPER - RAGDRYSAMSHESHEYPSLLTDKKNPDKNDENHGHSSEPTVDFSKKSLT 338
 Query 289 QRNRFSEVENLQGRYGAQSKDDEYNRLLTDKKNPDRYNGEYGHSSSEFTVNEFKDKKLJ 348

Query 339 GGLFSNLQDHHKGKVTKTAKYDINARIGHNRFRGSDATAINKDNEKAKHPIFTSDADNRLE 398
 Query 349 GELFSNLQDSSRKGNTKTYKRDIDANIYGNFRSOSATASDKEASSTKTRPFTSDAKNSLE 408

Query 399 GGFYGPNAEFLAGKFLTPDNKLFGVFGAQKOESEAKE-TRAILDAYALGTFENKSGTTNPAPF 457
 Query 409 GGFYGPNAEFLAGKFLTPDNKLFGVFGAQKOESEAKE-TRAILDAYALGTFENKSGTTNPAPF 457

Query 458 TANSKKELDNFQGNMINKVLGSTIDL-TQNDPFTKTDKEKPTTNOAGEPLTNDKV 515
 Query 467 TPFKTKQDLDNFQGNMINKVLGSTIDL-VLPPTGVTQDNFETFKPKPSATKAGETLMVNDKV 526

Query 516 RVQV-CCSNLHEHJLFGSLSIGDNSVFLQGERTATKGDOKDAMPVAGNAKYRSTWAGYV 573
 Query 527 SVKTYGYGRNFETYLFGEISVGTSNSVFLQGERTATG-EKAVPTKGTAKYLGWNVGYI 584

Query 574 AGSNTSKAYAQQADVANRAEFDANKSLTGKLNFTSDPKSAFDITATDGNGF 633
 Query 585 TGDSSKSNEAQDAD----FDIDFHKSKYRGKLTKDRQD-PVNNTGDIAGNGW 636

Query 634 SGKANTPDLFETGKJIKIDSNSKSESGR-VIVKDAVITGGFYGPQANLGGSFTYKSNDAGNQ 692
 Query 637 TKGASTTKADAGGYKIDS--SSTGKSVIKDAEVYGGFYGPNAEMGGSFTHNTD----- 689

Query 693 DKDSSASVVFGRKQOEVK 711
 Query 690 -DSKASVVFGRKQOEVK 706

RESULT 10
 US-08-613-005A-9
 Sequence 9, Application US/08613009A
 Patent No. 6090576

GENERAL INFORMATION:
 APPLICANT: Myers, Lisa E
 APPLICANT: Schryvers, Anthony B
 APPLICANT: Harkness, Robin E
 APPLICANT: Loosmore, Sheena M.
 APPLICANT: Du, Run-Pan
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Klein, Michel H
 TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella
 NUMBER OF SEQUENCES: 31
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Sim & McBurney
 STREET: 6th Floor, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: M5G 1R7
COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/513,009A
 FILING DATE: 08-MAR-1996
 CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24973
 REFERENCE/DOCKET NUMBER: 1038-542
TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 9:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 702 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: Linear

Query Match	49.9%	Score 1851.5;	DB 3;	Length 702;
Best Local Similarity	54.8%	Pred. No. 2.8e-125;		
Matches 401; Conservative	96;	Mismatches 184;	Indels	51;
	/			
1	MKHIPLTLTCAVAISAVIILTACCGGGSNPPAPTIPNAGAGNAGSGTGGAGST			
1	MKHIPLTLTCAVAISAVIILTACCGGGSNPPAPTIPNAGAGNAGSGTGGAGST			
61	GSGNGGASSGTGSASTTQPKYQDPTDKNKKDEVSQIQEPMGKVYBLKERNWIT			
60	GNTGGTNSGTGSBANTTPPKYQDPTKEQKSSQEPMGVALSKIN--			
121	AKINTNDVVKLEG----DLKHNPFDNSIMONIKN--SKEVQTYNQEOKNIT			
117	TPDIEKNTTLDKQVAEGKKSPLPFL--DVENKLLDGYTAKHNADQNAIC			
173	NKEL-DTALKALIERY----LDDIITSLAKPTEKRNNDSHDKQNKARTRD			
175	NTEKISDEELAKQIKEAVRKSHFQQVLISSLNKIIFHSN----DGTTKATTRD			
227	YIYRSGYSNIDQ-KKIAKGTGPDGALFYKGQTAKOLPVSE-VYKGTWDFMTI			
230	YIYLANDGNYLTIVTDKUWLNGPVGGVYNGTTAKELPTDAVYKGHDWFMTH			
284	SPSSFER--RAGDRYSAMSSHEPSLITDDKPKDMNDYGHSEBFETYDFSKA			
290	RFSBEVKENSQAGTYGASSKDEYNRJLTKEDSDPDGHSGBYGHSEFTYNFKNE			
342	FSNLQDHRHKGKVTKRYDINARLHGNRFRSATAIKNDTS-KHPFTSDAD			
350	FSNLQDHRHKGKVTKRYDINAHGNRFRSATAIKNDTS-KHPFTSDANN			

Qy	402	YGPNAEPLAGELTDNKLKGFLGVFGAKOSEAKE-TEAIDDAYALGTFNKS GTTNAFTANT	460
Db	408	YGPKGEBLAGELTDNKLKGFLGVFGAKOSEAKE-TEAIDDAYALGTFNKS GTTNAFTANT	-TFTPF 465
Qy	461	SKKELEDNFGNINKLVLGSTDVLTQGNDFVKTIDKEKPAETTNOAGEPLTVDNKVRQVC	520
Db	466	TEKQLDNFGNAKKLVLGSTDVLTQGNDFVKTIDKEKPAETTNOAGEPLTVDNKVRQVC	525
Qy	521	CSNLBHLKFGSLSIGDSNSVFLQGERTATKGDKDAMPVAGNAYKRGTWAGYVAGSGNTS	580
Db	526	GRNFETLKFGELSIGSHSVFLQGERTATGDKDAMPVAGNAYKRGTWAGYVAGSGNTS	583
Qy	581	KAYEAQOOFADNANRAEPDVDFANKSLTKLIPNTSDGKSAFDITATNGFSKANTP	640
Db	584	GT-GHSFTDQADVADEPIDEFGNKSVSCKLTGKRD--PVFSTGQTAGNGWIGTASRT	639
Qy	641	DIETGGGLKIDSNSKSESSR-VIVYDAAVGGFYGPQANLGGSFYTKSNDAGNQDKDSSAS	699
Db	640	KADAGGYKIDS--SSGKSVIKDANVTGGFIGPNANEMGGSFTHNAD-----DSKAS	690
Qy	700	VVFQGARKQQEVK 711	
Db	691	VVFQGTRQQEVK 702	
RESULT 11			
	US-08-778-570B-11	; Sequence 11, Application US/08778570B	
		; Patent No. 6437096	
		; GENERAL INFORMATION:	
		; APPLICANT: Myers, Lisa S	
		; Schryvers, Anthony B	
		; Harkness, Robin E	
		; Loosmore, Sheena M.	
		; DU, Run-Pan	
		; APPLICANT: Yang, Yan-Ping	
		; APPLICANT: Klein, Michel H	
		; TITLE OF INVENTION: transferrin Receptor Genes of Moraxella	
		; NUMBER OF SEQUENCES: 43	
		; CORRESPONDENCE ADDRESS:	
		; ADDRESSE: Sim & McBurney	
		; STREET: 6th Floor, 330 University Avenue	
		; C1T1: Toronto, Ontario	
		; STATE: Ontario	
		; COUNTRY: Canada	
		; ZIP: M5G 1R7	
		; COMPUTER READABLE FORM:	
		; MEDIUM TYPE: Floppy disk	
		; COMPUTER: IBM PC compatible	
		; OPERATING SYSTEM: PC-DOS/MS-DOS	
		; SOFTWARE: Patent in Release #1.0, Version #1.30	
		; CURRENT APPLICATION DATA:	
		; APPLICATION NUMBER: US/08/778,570B	
		; FILING DATE: 03-JAN-1997	
		; CLASSIFICATION: 536	
		; ATTORNEY/AGENT INFORMATION:	
		; NAME: Stewart, Michael I	
		; REGISTRATION NUMBER: 24973	
		; REFERENCE/DOCKET NUMBER: 1038-664	
		; TELECOMMUNICATION INFORMATION:	
		; TELEPHONE: (416) 595-1155	
		; TELEFAX: (416) 595-1163	
		; INFORMATION FOR SBQ ID NO: 11:	
		; SEQUENCE CHARACTERISTICS:	
		; LENGTH: 702 amino acids	
		; TYPE: amino acid	
		; STRANDEDNESS: single	
		; TOPOLOGY: linear	
	US-08-778-570B-11	Query Match 49.9%; Best Local Similarity 54.8%;	Score 1851.5; Pred. No. 2.8e-125; Length 702;

RESULT 12
 US-09-059-584-11
 ; Sequence 11, Application US/09059584
 ; Patent No. 6440701
 ; GENERAL INFORMATION:
 ; APPLICANT: Myers, Lisa E.
 ; APPLICANT: Schryvers, Anthony B.
 ; APPLICANT: Harkness, Robin E.
 ; APPLICANT: Loosmore, Sheena M.
 ; APPLICANT: Du, Run-Pan
 ; APPLICANT: Yang, Yan-Ping
 ; APPLICANT: Klein, Michel H.
 ; TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella
 ; NUMBER OF SEQUENCES: 60
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Sim & McBurney
 ; STREET: 6th Floor, 330 University Avenue
 ; CITY: Toronto
 ; STATE: Ontario

Qy 1 MKH1PLTTCVAISAVLTAACGGGSNNPPAPTPNAGGAGSGTGGAGSTDNAANA 60
 Db 1 MKH1PLTTCVAISAVLTAACGGGSNNPPAPTPNAGGAGSGTGGAGSTDNAANA 59
 Qy 1 GSTGAGSTGCGSASTOKPKYDVTDPKNDKQKDEBVGQIOPAMGYGVELKURNWIOPQEETH 120
 Db 60 GNTGGTNGTGSANTPKYDVTDPKNDKQKDEBVGQIOPAMGYGMALSKIN--LHNQD 116
 Qy 121 AKINTNDVYKLEG----DIKHNPPDNISWONIKN--SKEVQTYVYQNEQKONIENQIKE 172
 Db 117 TPLDEKNITLTDGKQVAEGRKSPLPFL--DVENKLQDGTYIAKVNVAQDNAIGDRIKG 174
 Qy 173 NKEL-DTKTALKALIERY---LDDYLTSLAKP1VTKNINDSHDKONKARTDLKVRSG 226
 Db 175 NKEISDELAQKIEAVRKSFQVLSLENKPHSN---DTGTTKATRDLKVRSG 229
 Qy 227 YIYRGYSNIDIQ-KKIAKTFGDFGALFYKGTQTAOKALPVS-EVKYGTWDFMTD-AKKGQ 283
 Db 230 YYLANDGNYLTVKTDKLWNLGPVGGFVYNGTTAKELPTDQAVKVRGHWDFMTDVANRN 289
 Qy 284 SFSSPER--RAGDRYSSMSSHEPSLTDQDKPKDNPYNDQHSSSEFTDPSKSLTGSL 341
 Db 290 RFSEVKENSOQAWYCGASKDYEYRNLTKEQDPSHGEYGHSSSEFTVNFKEKLTGKL 349
 Qy 342 FSNLQDEHKGKVTKRYDINARIHGNGRFESSATAINQDNESAKAHPFTSDADNRLEGPF 401
 Db 350 FSNLQDPHKGKVTKRYDIDANHGNPFRGESSATASNKNDS--KHPFTSDANRLEGPF 407
 Qy 402 YGPNAEELAGKFLTDQDKPKDNPYNDQHSSSEFTDPSKSLTGSL 460
 Db 408 YGPKGEELAGKFLTDQDKPKDNPYNDQHSSSEFTDPSKSLTGSL 465
 Qy 461 SKKELDNFGNINKLVLGSTVTDQDKPKDNPYNDQHSSSEFTDPSKSLTGSL 520
 Db 466 TEKOLDNFGNAKKLVLGSTVTDQDKPKDNPYNDQHSSSEFTDPSKSLTGSL 525
 Qy 521 CSNLEHLKFGSLISGDSNSVPLQGERTATRDKDAMPVAGNAKYRGTWAGYVAGSGNTS 580
 Db 526 GKNFEYIKGFLGSLIGGSNSVPLQGERTATRDKDAMPVAGNAKYRGTWAGYVAGSGNTS 583
 Qy 581 KAYEAQFQFDANRAEFDFDANKSLTGLKLIPLNTSSDGKSAFDITATDNGFSGKANTP 640
 Db 584 GT--GKSFDTQDVAEFDIDFGNKSVSGLKLTGKGD--PVFSTGQIAGNGWTCASRT 639
 Qy 641 DIETGSLKIDSKNSNSESGR-VIVKDAVIGGYGPQANELEGSSFTYKSDNAGQDSSS 699
 Db 640 KADAGSYKIDS--SSTGKSIVIKDANVTGGYGPVNAEMCGSFTHNAD-----DSKAS 690
 Qy 700 VVFGARKQOEVK 711
 Db 691 VVFGARKQOEVK 702
 Db 230 YYLANDGNYLTVKTDKLWNLGPVGGFVYNGTTAKELPTDQAVKVRGHWDFMTDVANRN 289
 Qy 284 SFSSPER--RAGDRYSSMSSHEPSLTDQDKPKDNPYNDQHSSSEFTDPSKSLTGSL 341
 Db 290 RFSEVKENSOQAWYCGASKDYEYRNLTKEQDPSHGEYGHSSSEFTVNFKEKLTGKL 349
 Qy 342 FSNLQDPHKGKVTKRYDINARIHGNGRFESSATAINQDNESAKAHPFTSDADNRLEGPF 401
 Db 350 FSNLQDPHKGKVTKRYDINARIHGNGRFESSATAINQDNESAKAHPFTSDADNRLEGPF 407
 Qy 402 YGPNAEELAGKFLTDQDKPKDNPYNDQHSSSEFTDPSKSLTGSL 460
 Db 408 YGPKGEELAGKFLTDQDKPKDNPYNDQHSSSEFTDPSKSLTGSL 465
 Qy 461 SKKELDNFGNINKLVLGSTVTDQDKPKDNPYNDQHSSSEFTDPSKSLTGSL 520
 Db 466 TEKOLDNFGNAKKLVLGSTVTDQDKPKDNPYNDQHSSSEFTDPSKSLTGSL 525
 Qy 521 CSNLEHLKFGSLISGDSNSVPLQGERTATRDKDAMPVAGNAKYRGTWAGYVAGSGNTS 580
 Db 526 GKNFEYIKGFLGSLIGGSNSVPLQGERTATRDKDAMPVAGNAKYRGTWAGYVAGSGNTS 583

Qy 581 KAYAQOFADNANRAEFPDVDPANKSLTGKLIPTNTSSDGKSAFDITATIDNGFSKANTP 640
 Db 584 GT--GKSFPTDAQDVADFDIDFGNKSIVSGKLITKGQD--PVSITGQIAGNGWITGASTR 639
 Qy 641 DIETGGKLKIDSRSNSESGR--YIVKDAIVIGGFYGPOANELEGGSFITYKSNDAGNQDKDSSA 699
 Db 640 KADAGGYKIDS--SSTGKSIVIKDANVTGGFYGPNAMEMGGSFTNAD-----DSKAS 690
 Qy 700 VVFGARKQEVK 711
 Db 691 VVFGTRKRQEVK 702

RESULT 13
 ; Sequence 25, Application US/08867941
 ; Patent No. 5577337
 ; GENERAL INFORMATION:
 ; APPLICANT: Loosmore, Sheena M
 ; DU, Run-Pan
 ; APPLICANT: Wang, Qijun
 ; APPLICANT: Yang, Yan-Ping
 ; APPLICANT: Klein, Michel H
 ; TITLE OF INVENTION: LACTOFERRIN RECEPTOR GENES OF MORAXELLA
 ; NUMBER OF SEQUENCES: 67
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Sim & McBurney
 ; STREET: 6th Floor, 330 University Avenue
 ; CITY: Toronto
 ; STATE: Ontario
 ; COUNTRY: Canada
 ; ZIP: MSG 1R7
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent In Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/867,941
 ; FILING DATE: 03-07-1997
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Stewart, Michael I
 ; REGISTRATION NUMBER: 24,973
 ; REFERENCE/DOCKET NUMBER: 1038-681 MJS:jb
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (416) 595-1155
 ; TELEFAX: (416) 595-1163
 ; SEQUENCE FOR SEQ ID NO: 25:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 702 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; US-08-867-941-25

Qy 173 NKEL-DKALKALIEKV ---LDDYLTSLAKPIYEKVNINDSHDKQNKKARTDLKYYVRSG 226
 Db 175 NKEISDEELAKQIKAEVRSHEFOQVQSSLNENKIFHSN ---DCTTKATTRDQKXYVDG 229
 Qy 227 YIYRGYSNADIQ--KRIAKTGFQDGLTAKQQLPVS-EVKKGTFDFMTD-AKKGQ 283
 Db 230 YIYLANDGNYLTVKTKTAKLNLPGVGGFYNGTTAKELPQDAVXKGHDFMTDVANRNN 289
 Qy 284 SFSSPER--RAGDRYAMSHEYPSLLTDQKNDKNDYNDDEYGHSESEFTVDFSKKSLTGGI 341
 Db 290 RFSEYTKENSGAGWYGAASSDEYRLLTKESDA9DGHSGYGHSESEFTVNFKEKLGTGKL 349

Qy 342 FSNLODHHKCKVTKTKTAKRQFDSATIANKDNEKAKHPPFTSDADNRLLEGFF 401
 Db 350 FSNLQDRHKGSVNTKTCRVDIDANHGNRFRGSATANRKNDS--KHPFTSDANRLLLEGFF 407

Qy 402 YGPNBELLAGKFLLTDNKLFGVGAQKESBAK--TEAII DAYA LGTGENKSGTINFAFTAN 460
 Db 408 YGPKGKBEELAGKFLLTDNKLFGVGAQKRESKAEKCTEAI DAYA LGTGENKSGTINFAFTAN--TFTPF 465

Qy 461 SKKELDNFGNINKLVLVGLSTVIDLTQGNDPFVKTIDKEPKATTNQAGEPLVNDKVRVOYC 520
 Db 466 TEKQDNDFNGRAKVLVLGSTVIDLVFTDATTNEFTDKPSSATNSAGETMUNDESVKRY 525

Qy 521 CSNLEHLKEGSLSIGDSNSVPLQGERTATKGDKDAMPVAGNAKRGTMAGYVAGGSNTS 580
 Db 526 GKNPFLYKCELSIGGSHSVPLQGERTATG--EKAVPTGTAKLGNVNGYITCKDTGT 583

Qy 581 KAYAQOFADNANRAEFPDVDPANKSLTGKLIPTNTSSDGKSAFDITATIDNGFSKANTP 640
 Db 584 GT--GKSFPTDAQDVADFDIDFGNKSIVSGKLITKGQD--PVFSITGQIAGNGWITGASTR 639

Qy 641 DIETGGKLKIDSRSNSESGR--YIVKDAIVIGGFYGPOANELEGGSFITYKSNDAGNQDKDSSA 699
 Db 640 KADAGGYKIDS--SSTGKSIAKDNVITGGFYGPNAMEMGGSFTNAD-----DSKAS 690

Qy 700 VVFGARKQEVK 711
 Db 691 VVFGTRKRQEVK 702

RESULT 14
 US-09-074-658-25
 ; Sequence 25, Application US/09074658
 ; Patent No. 6184371
 ; GENERAL INFORMATION:
 ; APPLICANT: Loosmore, Sheena M
 ; APPLICANT: Run-Pan Du
 ; APPLICANT: Qijun Wang
 ; APPLICANT: Yang, Yan-Ping
 ; APPLICANT: Klein, Michel H
 ; TITLE OF INVENTION: LACTOFERRIN RECEPTOR GENES OF MORAXELLA
 ; NUMBER OF SEQUENCES: 78
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Sim & McBurney
 ; STREET: 6th Floor, 330 University Avenue
 ; CITY: Toronto
 ; STATE: Ontario
 ; COUNTRY: Canada
 ; ZIP: MSG 1R7
 ; COMPUTER READABLE FORM:
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent In Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/074,658
 ; FILING DATE: 08-MAY-1998
 ; CLASSIFICATION: 435

Qy 121 AKINTNDVYKLEG----DLKHNPFDNSTWQNIKN---SKEVQTYNNQKQNTENQIKE 172
 Db 117 TPLDEKRNITLDGKQVAEGRKSPLPFL--DVENKLIDGKIAKMNVADKNAIGDRKG 174

Qy 121 AKINTNDVYKLEG----DLKHNPFDNSTWQNIKN---SKEVQTYNNQKQNTENQIKE 172
 Db 117 TPLDEKRNITLDGKQVAEGRKSPLPFL--DVENKLIDGKIAKMNVADKNAIGDRKG 174

TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 25:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 702 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-09-074-658-25

Query Match 49 8%; Score 1847 5; DB 3; Length 702;
 Best Local Similarity 54.0%; Pred. No. 125;
 Matches 401; Conservative 95; Mismatches 185; Indels 51; Gaps 21;

Qy 1 MKHPLTLTLCVIAISAVLTTACGGGSSNNPAPTPNAGAGNAGSGTGGAGSTDNAANA 60
 Db 1 MKHPLTLTLCVIAISAVLTTACGGGSSNNPAPTPNAGAGGDTNTANA 59

Qy 61 GSTGGASSGTGSGTASSTOKPQDVKDDEVSGIQEPANGYGYBKLRLNWIPOQEENH 120
 Db 60 GNTGGTNSGTSANTPBPRTDVKPTEKRNEDKVSSIQEPANGYGYBALSIN--LHNROD 116

Qy 121 AKINTNDVVKLEG----DLKHNPDDNSIMONIKN--SKEVQTYNNQEKONIENOIKE 172
 Db 117 TPLDERNITLGDKKQVAEGCKSPLPFLS--DVENKLQDGTYIAKRNVAIGDRKG 174

Qy 173 NKE1-DTVALKALIERY----LDDYLTSLAKPIERNINDSHDKONKARTDRDLYKVRSG 226
 Db 175 NKE1SDEELAKQIAKEAVRSHEFOQVLSLENKIPHSN---DGTTKATTRDLYKVDG 229

Qy 227 YIYRGSYNSNDIQ-KKIAKTAGFQGKCTQTAKOLPVSE-VKYGKGTWDFMTD-AKRGQ 283
 Db 230 YIYANGNYLTIVTRDLMNLPVPGFYFNGTTAELPTDAVKFGHDFMTDVANRN 289

Qy 284 SFSSPER--RAGDRYSAMSSHEYPSNLTDKKNPKPONYNDBYGHSSBSEFTVDFSKKSLTGSL 341
 Db 290 RFSEVKNSQAGWYGAISKDQYBNTLKEKTFKKEKLTGKL 349

Qy 342 FSNLQDHHKGVTKYDINAR1HFNRFQSSATA1KDNQESKAGHPFTSDADNRLLEGF 401
 Db 350 FSNLQDRHKGNVTKYDIDAN1HGNRFQSSATSNKNNTS--KHPFTSDANNRLEGGF 407

Qy 402 YGPNAELAKPLTDDNKLFCVGFQAKQESAKE-TEA11DAYALGTENKSGTTNPAFTAN 460
 Db 408 YGPKGELLAGFLTNKLFCVGFQAKQESAKE-TEA11DAYALGTENKSGTTNPAFTAN--TFTPF 465

Qy 461 SKKELDNFGNINKVLGISTVDTLQGNDFTKIDKEKPATTNQAGEPLTYNDKVRQVC 520
 Db 466 TEKOLDNFGNARKVLGISTVDTLQGNDFTKIDKPESATNEGETLYMNDEVSKYX 525

Qy 521 CSNLEHLLKFGSLSIGDSNSVFLQGERTATGDKAMPVAGNAKFRGTYVAGSGNTS 580
 Db 526 GKNFEYLFKGELSIGSSHSPFLQGERTATGDKAMPVAGNAKFRGTYVAGSGNTS 583

Qy 581 KAYEAQOFADNANRAEFDVDFANKSLTGLKJLNPNTSDGKSAFDITATGNGFSKANTP 640
 Db 584 GT--GKFSDTQDVAEFDIDFGNKSFGRLITKGRD--PVFSITGQIAGNGWGTAST 639

Qy 641 DIFTGGLKIDSKNSESGR--VIVKDAIVIGSFYGPQANEIPLGGSPFTYKSNADGNQDKSSA 699
 Db 640 KADAGYKIDS--SSYGKSTAIKDANVGGFYPWANEMCGSFTINAD-----DSKAS 690

Qy 700 VVFGARKQEVK 711
 Db 691 VVFGTRKRQQEVK 702

RESULT 15
 US-08-613-009A-10
 ; Sequence 1.0, Application US/08613009A
 ; Patent No. 6090576
 ; GENERAL INFORMATION:

APPLICANT: Myers, Lisa E
 Schryvers, Anthony B
 APPLICANT: Harkness, Robin E
 APPLICANT: Loosmore, Sheena M.
 APPLICANT: Du, Run-Pan
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Klein, Michael H
 TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella
 NUMBER OF SEQUENCES: 311
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Sim & McBurney
 STREET: 6th Floor, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: MSG 1R7
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.3.0
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/613,009A
 FILING DATE: 08-MAR-1996
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24973
 REFERENCE/DOCKET NUMBER: 1038-542
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 10:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 682 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-613-009A-10

Query Match 47.3%; Score 1754.5; DB 3; Length 682;
 Best Local Similarity 53.5%; Pred. No. 2.7e-118;
 Matches 381; Conservative 96; Mi smatches 184;
 Indels 51; Gaps 21;

Qy 21 CGGSGGSNNPBPAPTPNAGAGNAGSGTGGAGSTDNAANAGSTGGASSGCTGSASTOKPVY 80
 Db 1 CGGSGGSNNPBPAPTPNAGSGSGTCT-TCNAGGTDTNTANAGNTGTNSGTSANTPEPKV 59

Qy 81 QDVPDIDNKKDDEVSQIQEPANGYGVELKERNWIPOQEBAHKINTDVVKLKG--DL 135
 Db 60 QDVPDPEKNDKQVSSIQEPANGYGMALSKIN--LHNRODTPDLEKNTITLDGKQVAEQ 116

Qy 136 KHNPDNSIWQNTK--SKEVQTYNNQEKONTENQIKKENKEL-DKTAALKALIEKV-- 188
 Db 117 KKSPPLPFLS--DVERKLQGYIAKMNVADKNAIGDRIGKGNKESEBLAKQI-KEAVRK 174

Qy 189 -LDDYLTSLAKPLXKVNINDHKQNKARTDRDLYKVRSGYIYRSQYNSDIO-KKIAKT 245
 Db 175 HEFOQVLLSLENKFLHSN---DGTTKATTRDLYKVDYQYLLDNGNLYTVKTDKLWNL 229

Qy 246 GFDGALFYKQGTQTAKOLPVSE-VKYGKGTWDFMTD-AKKGQSFSSER--RAGDRYSAMSS 301
 Db 230 GPVGVYFNGTTAKELPFDQAVKKGHDFTDVANRNRFSSEVTKENSOAGWYQASSK 289

Qy 302 HEYPSLTDQKNDYDQHGSSEFTVDFSKSLSLGGFLFSNLQDHHKGVTKYKRYDI 361
 Db 290 DEYNRLLTKEEDSAPPHSGEYGHSSSEFTNFKEKLGLFSNLQDRHKGNVTKERYDI 349

Qy 362 NARIHGNRFQSGSATPAINKONESAKHPFTSDADNRLLEGFGYGPNAEELAGKFTTDNKL 421
 Db 350 DANHGNRFQSGSATPNKNNTS--KHPFTSDANNRLEGFSYGPKGEELAGKFTTDNKL 407

Qy 422 GVFGKQSEAKE-TEA11DAYALGTENKSGTTNPAFTANSKKELDNFGNINKVLGGSTV 480

Db	408	GVEGAKRESKAEBTEAELDAVALGTTNTSNTA--TPTPTEKQDNNFGNKKLVLGSTV	465	Qy	81	QDVTPTDKKDKDEVSQIOPPANGYGYELKLRNWIPOQEHEAKINTNDVYLEG-----DL 135
Db	481	IDPQTQNDFVKTIDKEKATTINQAGBLPTNDKVRVQVCCSNLEHLKFGSLSIGDSNSV	540	Qy	82	60 QDVTPTEKEOKVSS--QEPANGYGMALISKIN-- -LENRQDTPDKEKNIITLJGKQVABG 116
Db	466	IDLVPDTAKNEFTKDEPESATNEAGTLMNDEVSRTKTYGNFETLKGELSIGGSHV	525	Qy	136	136 KHNPDNSIWNQIN-- -SKEVQTYNOEONKONIENQIKKENEL-DKTKALKIKEY-- -188
Db	541	FLOGERDTAKGDKDAMPVAGNAKYRGTTWAGYAGSGNTSKAYEAQOFADNANRAEFDVD	600	Qy	117	117 KKSPLPFLS--DVENKLIDGYTAKNNVADKNAIGRICKENKEISBELAQKIEAVRK 174
Db	526	FLOGERDTAKGDKDAMPVAGNAKYRGTTWAGYAGSGNTSKAYEAQOFADNANRAEFDVD	581	Qy	189	189 -LDIYLTSLAKPIYKNINDSHDOKKNTARLDTVRSGYIYRSQYSNIDQ-KKIAKT 245
Db	601	FANKSLTCKLIDNNTSSDOKSAFDITATIDGNGSGKNTPLTETGKLIKDKNSSEGR-V	659	Qy	175	175 HEFQVQISSLLENKIFHSN----DGTTKATTRDLYCVDGYLANDGNYLTVKTDLWNL 289
Db	582	FGNKSVGKLTKGRQD--PVPSTGQIAGNGWTCIATSTKADAGGYKIDS--SSTGKSI	637	Db	246	246 GFDGALFYKGQTOKAOLPVSE-VKTKGTDWDFMTD-ARKGQSFSSFER--RAGDRYSAMSS 301
Qy	660	IVRDAIYIGGYGPOANBLGGSPSYKTSNDAGNQDKDSSASAVFGARKQEQYK	711	Qy	230	230 GPVGGYFVNGTTABLTPODAVKKGHWDFMTD/ANRRAFSEYKENSQAGWYHGASSK 289
Db	638	VTKDANVTTGGFGPNANEMGGSPTHNAD-----DSKASAVFGTRQRQEYK	682	Qy	302	302 HEYPSLTTDDKDNKPNPONYNDEYGHSSBFTVDFSKKSLTGGFLPSNLQDHKGKVTKTKEYDI 361
Db	643	VTKDANVTTGGFGPNANEMGGSPTHNAD-----DSKASAVFGTRQRQEYK	682	Db	290	290 DEYNRULTKEDSAPDGHSGEYGHSSBFTVNFKEKLTGKLFPSNLQDRHKGNVTKTKEYDI 349
RESULT 16	US-08-778-570B-12	Sequence 12, Application US/08778570B		Qy	350	350 DANIHGNFRFGSATASNKNDS--KHPFTSDANNRLEGGFYGPKGBELAGKFLTDNNKLF 407
				Qy	362	362 NARIHGNFRFGSATASNKNDS--KHPFTSDANNRLEGGFYGPKGBELAGKFLTDNNKLF 421
				Qy	422	422 GVFGAKOESBKE-TRAILDAYALGTFNKSGTTPNAPFTANSKELDNFNGNINKLVLGSTV 480
				Db	408	408 GVFGAKRESBKE-TRAILDAYALGTFNKSGTTPNAPFTANSKELDNFNGNINKLVLGSTV 465
				Qy	481	481 IDLTQGNDFVKTIDKEKPATTTNOQAGEPLTNDKTRVQVCSNLBEHKFGSLSIGDSNSV 540
				Db	466	466 IDLVPIDATKNEFTDKKPESATNEAGTLMNDESVKTKYGNFVYLKFOBLSIGSSHSV 525
				Qy	541	541 FLQGERTATKGDOKAMPVAGNAKRGTWAGYVAGGGNTSKAYEAQFADNANRAFBFDV 600
				Db	526	526 FLQGERTATG--EVAKPTGCTAKLYGNWYGYITGKDGTGT--GKSFTDAQDADPDD 581
				Qy	601	601 FANKSLTCKLIPNTSSDGKSAFDITATIDGNGSGKNTPLTETGKLIKDKNSSEGR-V 659
				Db	582	582 FGNKSVGKLTKGRQD--PVPSTGQIAGNGWTGTASTKADAGGYKIDS--SSTGKSI 637
				Qy	660	660 IVRDAIYIGGYGPOANBLGGSPSYKTSNDAGNQDKDSSASAVFGARKQEQYK 711
				Db	638	638 VTKDANVTTGGFGPNANEMGGSPTHNAD-----DSKASAVFGTRQRQEYK 682
						RESULT 17
						US-09-059-584-12
						; Sequence 12, Application US/09059584
						; Patent No. 6440701
						GENERAL INFORMATION:
						APPLICANT: Myers, Lisa E.
						APPLICANT: Schnyvers, Anthony B
						APPLICANT: Harkness, Robin E.
						APPLICANT: Loosmore, Sheena M.
						APPLICANT: Du, Run-Pan
						APPLICANT: Yang, Yan-Ping
						APPLICANT: Klein, Michel H
						TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella
						NUMBER OF SEQUENCES: 43
						CORRESPONDENCE ADDRESS:
						ADDRESS: Sium & McBurney
						STREET: 6th Floor, 330 University Avenue
						CITY: Toronto
						STATE: Ontario
						COUNTRY: Canada
						ZIP: M5G 1R7
						COMPUTER READABLE FORM:
						COMPUTER: IBM PC compatible
						OPERATING SYSTEM: PC-DOS/MS-DOS
						CURRENT APPLICATION DATA:
						APPLICATION NUMBER: US/08/778,570B
						FILING DATE: 03-JAN-1997
						CLASSIFICATION: 536
						ATTORNEY/AGENT INFORMATION:
						NAME: Stewart, Michael I.
						REGISTRATION NUMBER: 24973
						REFERENCE/DOCKET NUMBER: 1038-664
						TELECOMMUNICATION INFORMATION:
						TELEPHONE: (416) 595-1155
						TELEFAX: (416) 595-1163
						INFORMATION FOR SEQ ID NO: 12:
						SEQUENCE CHARACTERISTICS:
						LENGTH: 682 amino acids
						TYPE: amino acid
						STRANDEDNESS: single
						TOPOLOGY: linear
						US-08-778-570B-12
						Query Match
						Best Local Similarity 53.5%; Pred. No. 2.7e-118;
						Matches 381; Conservative 96; Mismatches 184; Indels 51; Gaps 21;
						Qy 21 CGGGCGNNPAPTPINAGGAGNAGSGCTGGASTDNANAGSTGGSSGTSASTOKP 80
						Db 1 CGGGCGNNPAPTPINAGSNTGN-TGAGGTDTNTAGNTGGNTGSGNTPEP 59

FILING DATE: 14-APR-1998
 CLASSIFICATION: 1
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/7778, 570
 FILING DATE: 03-JAN-1997
 CLASSIFICATION:
 NAME: Stewart, Michael I.
 REGISTRATION NUMBER: 24773
 REFERENCE/DOCKET NUMBER: 1038-794
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1135
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 12:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 682 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 -09-059-54-12

Query Match	Score	Best Local Similarity	Score	Best Local Similarity
Matches 381; Conservative	47.3%	53.5%	53.5%	53.5%
Matches 381; Conservative	96;	Mismatches	96;	Mismatches
21 CGGGGSNPPAPPPIPNNAGAGNAGAGSGN				
21 : : : : : : : : :				
1 CGGGGSNPPAPPPIPNNAGSGN				
1 : : : : : : : : :				
81 QDYPPTDKNKKDEVSQIOPBAMGYGVLF				
81 : : : : : : : : :				
60 QDYPTEKNEBQDKVSIQBPBAMGYGMAUS				
60 : : : : : : : : :				
13.6 KHNPFDNSIWIQNQKNN--SKEVQTQVNYC				
13.6 : : : : : : : : :				
11.7 KCSPLPPL7--DVENKLQDGYKQHNMV				
11.7 : : : : : : : : :				
18.9 -LDDYLTSLAKPDIYEKJNINDSHDKQH				
18.9 : : : : : : : : :				
17.5 HEFQQLVSSLLENKIFHSN----DGTIP				
17.5 : : : : : : : : :				
24.6 GFDGALFYKGQTOKALPVS-EVKYKG				
24.6 : : : : : : : : :				
23.0 GPVGGVFFNTGTTAKELPTQDAVKYKG				
23.0 : : : : : : : : :				
3.02 HEYPSLTTDDKDKPKDPDNYIDEYGHSSSEF				
3.02 : : : : : : : : :				
2.90 DEYNRLQKEDTSDAPDGHGEYGHSSSEF				
2.90 : : : : : : : : :				
36.2 NARIHGNFRGSGATAINKDNEKAKHPP				
36.2 : : : : : : : : :				
35.0 DANIHGNFRGSGATAASNKNNTS--KHP				
35.0 : : : : : : : : :				
4.22 GIVFGAKRSSKAEEKTEAFLDAYALGTF				
4.22 : : : : : : : : :				
4.08 GIVFGAKRSSKAEEKTEAFLDAYALGTF				
4.08 : : : : : : : : :				
4.81 IDLTQGNFVKLIDKEPKATTMNOAGE				
4.81 : : : : : : : : :				
4.66 IDLVPDTKNEETKDKKEESATNEAGE				
4.66 : : : : : : : : :				
54.1 FLOGERTATKGDKDAMPAGNAYKRG				
54.1 : : : : : : : : :				
52.6 FLOGERTATTG--EKAVPTGTAKYLG				
52.6 : : : : : : : : :				
6.01 FANKSLTRKLIPNTSSDGRSAFDITATI				
6.01 : : : : : : : : :				
5.82 FGNKSVSGKLITKGQD--PVFSITGQ				
5.82 : : : : : : : : :				
66.0 IVKDAIVIGGFYGPQANFLGGSSPTYKS				
66.0 : : : : : : : : :				
63.8 VIKDANTVGGFYPNANMGGSFTHNA				
63.8 : : : : : : : : :				

RESULT 18
 US-09-540-236-2388
 ; Sequence 2388, Application US/09540236
 ; Patent No. 6673910
 ; GENERAL INFORMATION:
 ; APPLICANT: Gaty L. Breton et al.
 ; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO MORAXELLA
 ; TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS
 ; FILE REFERENCE: 2709 2005-001
 ; CURRENT APPLICATION NUMBER: US/09/540,236
 ; CURRENT FILING DATE: 2000-04-04
 ; NUMBER OF SEQ ID NOS: 3840
 ; SEQ ID NO: 2388
 ; LENGTH: 416
 ; TYPE: PRT
 ; ORGANISM: M.catarrhalis
 US-09-540-236-2388

Query Match 29 3%; Score 1088; DB 4; Length 416;
 Best Local Similarity 57.8%; Pred. No. 1.8e-70;
 Matches 231; Conservative 41; Mismatches 106; Indels 22; Gaps 9;

Qy	315 PDNYYNDGHSSEFTYDFSKSLTGGLFSNLQDHHKKG-VTKTKYDINARIHGHNFRGGS 373
Db	35 PSNTYNGAYHSSEFTYDFNFAKVKVTKLISN--QL-SGKTVTAKERYKIEADIGHNRFRGS 91
Qy	374 ATAINKDNESKAKHPPTSADNRLLEGQFYGPNAEELAGKELTDNNKLFGVGAKESEAK 433
Db	92 AIASETKDESKSKHPPTSADOKLEGQFYGPKGEBELAGKELTDNNKLFGVGAQEAK 151
Qy	434 ETEAII DAYA LGTGFNSKGTTNPAFTANSKCKBDLNFNGNKLVLGTVIIDL-TQGRNDFVK 491
Db	152 PTEAII DAYA LGTGFNTNDAT-TFTPTKQDLDNGNAKLVLGTVIIDLVPTDATAKDVN 209
Qy	492 TIDKEKPATTAQNEQSEPLTNDKVRQVQCSNLEHUKPGSLSIGDSNSVFLQGERTATKG 551
Db	210 EPTKPKNPESATNKAGETLMMNDKTVSKVTKYQKNEFYLKGELSVGTNSNSVFLQGERTVTTG 269
Qy	552 DRDKRAMPVAGNAKTRGTTWAGYVAGSGNTSKAYEAQOFADNANRAEDVDPANKSLTGKLI 611
Db	270 -EKAVPTTGTAKVQNWGVIA-GKDTGAGSSKGFTDAKVDADIDPEKKTNGKLT 325
Qy	612 PNTSSPGKSAFDITATIDGNGFSGKANTPDIETGSKIDSNSKNSSEGRVLYKDAIYGGFY 671
Db	326 TQGRQP--PWNITCQIAQNGWTGTAATKANAGYXINIDSSSTNRSIVKDAEYGGFY 383
Qy	672 GPQANELGGSTYKSNDAQNDKQSSASVFGARKQOEVK 711
Db	384 GPNAEMGGSFTHNAD-----DSKVSVVFGTKK-QEVK 415

RESULT 19
 US-08-613-009A-20
 ; Sequence 20, Application US/08613009A
 ; Patent No. 6090576
 ; GENERAL INFORMATION:
 ; APPLICANT: Myers, Lisa E.
 ; APPLICANT: Schryvers, Anthony B.
 ; APPLICANT: Harkness, Robin E.
 ; APPLICANT: Locsmore, Sheena M.
 ; APPLICANT: Du, Run-Pan.
 ; APPLICANT: Yang, Yan-Ping.
 ; APPLICANT: Klein, Michael H.
 ; TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella
 ; NUMBER OF SEQUENCES: 31
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Sim & McBurney
 ; STREET: 6th Floor, 330 University Avenue
 ; CITY: Toronto
 ; STATE: Ontario
 ; COUNTRY: Canada

COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/613,009A
 FILING DATE: 08-MAR-1996
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24973
 REFERENCE/DOCKET NUMBER: 1038-542
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 20:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 601 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-613-009A-20

Query Match 25 6%; Score 950; DB 3; Length 601;
 Best Local Similarity 36.0%; Pred. No. 2.8e-60;
 Matches 242; Conservative 105; Mismatches 207; Indels 118; Gaps 26;

Qy 64 GGASSGTGAST-----QKPKYQDVTDPDKKKDEYSGIQPAMGYGVEKLRN--WIPOE 116
 Db 24 GGGSFIDDSVETQDMHSKPKYEDKSQPSQDVSNSGAAYGPAVKLPRRNHFNPKY 83

Qy 117 QEEHAKINTNDVVKLEGDLKHNPFNSIWNQKNSKEVQTVNQEKONIENOIKKENKL 176
 Db 84 KE-----KHKPLGSMWDKKLQRGP-----NSSERDELEKRGSSS- 120

Qy 177 DKTALKALIEKVLDYDYLTSLAKPIYEKNINDSHDKQNKAARTDLKVKRSGYIYRSGYSNI 236
 Db 121 -----LIESKWD-----GOSRVGYNTFTYVRSGYVYLN-KNNI 154

Qy 237 DIQKIAKAKTGFDPGALPYKGQTAKOLPVSEVYKGTWDFMTDAKKGQSFSFERRA-GDR 295
 Db 155 DIKNNIVLFPGDGYLYKGKPKSPKSEKITYKGTWDDYVTDAMEKQFPEGLGSAAGGDK 214

Qy 296 YSAMSHHEYPSLTDQDKNPQDNYDEGHSSSEFTYDFSKKSLSLTGGLFSN--LQDHHKGK 352
 Db 215 SGALSALE-EGVLRNOAEASSGHTD-FGWTSEFEDFSKDTIKGTLYRNRRITONSENK 272

Qy 353 VTKTKYDINARITHGNRFRGSGATAINKDNESEKAKHPTSDADNRLEGGFYGPNAEELACK 412
 Db 273 QIKTTXYTQATLHGRFRGKALAADK-GAINTSHFISDSDS-LEGGFYGPKGEBLAK 330

Qy 413 FLTDDNKLFLGYFGAKOSE-----AKETEAIILDAYALGTPNKSGTTPAFTANSKKE 465
 Db 331 FLSNDKRVAAVFGAKQKDKDGENAAGPATEVYDARYI-----TGEEF--KKEQI 379

Qy 466 DNFGNINKLVQJSTVDL-TQGND--FVKTIDKEKPATTNOAQBPLTVNDKVRVQVCC 521
 Db 380 DSFGDVYKLLDVGVELSLPSEGKZAFQHIEQ-----NGVKAUTVCC 422

Qy 522 SNLEHLKFGSLSIGDSNSVFOGLERTATKGDKDAMPVAGNAYKRTGWTAGYVAGSGNTSK 581
 Db 423 SNLDNSFGKLSKENKDDMFQVTPV--SDVAARTEANAKRTGWTAGYIA-NGTNS 478

Qy 582 AYEQQAFDANRAEFDVDFANKSLTGKLIPTNTSSDCKS-AFDITATDNGFSGKANTP 640
 Db 479 GEASNQFTEGGNRAEFVDFSTKLSGT-----TAKDRTSPFTTAMIKDNGFSEVAKTG 535

Qy 641 DIETGGKIDSKNSSESGRVIYKDAVYIGFYGPQANBLLGGSFYKSN-DAGQNQDDSSAS 699
 Db 536 E--NGFALDPONTGNSHYTHEATVSGFPGKNALEMGSFSPPGNAFBGKQEK--AS 589

Db 700 VVFGARKQOEYK 711

Db 590 VVFGAKRQOLVQ 601

RESULT 20
 US-08-778-570B-26
 Sequence 26, Application US/08778570B
 ; GENERAL INFORMATION:
 ; Patent No. 6437096
 ; APPLICANT: Myers, Lisa E
 ; APPLICANT: Schryvers, Anthony B
 ; APPLICANT: Harkness, Robin E
 ; APPLICANT: Loosmore, Sheena M.
 ; APPLICANT: Du, Run-Pan
 ; APPLICANT: Yang, Yan-Ping
 ; APPLICANT: Klein, Michel H
 ; APPLICANT: Transferrin Receptor Genes of Moraxella
 ; NUMBER OF SEQUENCES: 43
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Sim & McBurney
 ; STREET: 6th Floor, 330 University Avenue
 ; CITY: Toronto
 ; STATE: Ontario
 ; COUNTRY: Canada
 ; ZIP: MSG 1R7
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/778,570B
 ; FILING DATE: 03-JAN-1997
 ; CLASSIFICATION: 536
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Stewart, Michael I
 ; REGISTRATION NUMBER: 24973
 ; REFERENCE/DOCKET NUMBER: 1038-6-64
 ; TELECOMMUNICATION: 1038-6-64
 ; TELEPHONE: (416) 595-1155
 ; TELEFAX: (416) 595-1163
 ; INFORMATION FOR SEQ ID NO: 26:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 601 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 US-08-778-570B-26

Query Match 25 6%; Score 950; DB 4; Length 601;
 Best Local Similarity 36.0%; Pred. No. 2.8e-60;
 Matches 242; Conservative 105; Mismatches 207; Indels 118; Gaps 26;

Qy 64 GGASSGTGAST-----QKPKYQDVTDPDKKKDEYSGIQPAMGYGVEKLRN--WIPOE 116
 Db 24 GGGSFIDDSVETQDMHSKPKYEDKSQPSQDVSNSGAAYGPAVKLPRRNHFNPKY 83

Qy 117 QEEHAKINTNDVVKLEGDLKHNPFNSIWNQKNSKEVQTVNQEKONIENOIKKENKL 176
 Db 84 KE-----KHKPLGSMWDKKLQRGP-----NSSERDELEKRGSSS- 120

Qy 177 DKTALKALIEKVLDYDYLTSLAKPIYEKNINDSHDKQNKAARTDLKVKRSGYIYRSGYSNI 236
 Db 121 -----LIESKWD-----GOSRVGYNTFTYVRSGYVYLN-KNNI 154

Qy 237 DIQKIAKAKTGFDPGALPYKGQTAKOLPVSEVYKGTWDFMTDAKKGQSFSFERRA-GDR 295
 Db 155 DIKNNIVLFPGDGYLYKGKPKSPKSEKITYKGTWDDYVTDAMEKQFPEGLGSAAGGDK 214

Qy 296 YSAMSHHEYPSLTDQDKNPQDNYDEGHSSSEFTYDFSKKSLSLTGGLFSN--LQDHHKGK 352
 Db 215 SGALSALE-EGVLRNOAEASSGHTD-FGWTSEFEDFSKDTIKGTLYRNRRITONSENK 272

Qy 353 VTKTKYDINARITHGNRFRGSGATAINKDNESEKAKHPTSDADNRLEGGFYGPNAEELACK 412
 Db 273 QIKTTXYTQATLHGRFRGKALAADK-GAINTSHFISDSDS-LEGGFYGPKGEBLAK 330

Qy 413 FLTDDNKLFLGYFGAKOSE-----AKETEAIILDAYALGTPNKSGTTPAFTANSKKE 465
 Db 331 FLSNDKRVAAVFGAKQKDKDGENAAGPATEVYDARYI-----TGEEF--KKEQI 379

Qy 466 DNFGNINKLVQJSTVDL-TQGND--FVKTIDKEKPATTNOAQBPLTVNDKVRVQVCC 521
 Db 380 DSFGDVYKLLDVGVELSLPSEGKZAFQHIEQ-----NGVKAUTVCC 422

Qy 522 SNLEHLKFGSLSIGDSNSVFOGLERTATKGDKDAMPVAGNAYKRTGWTAGYVAGSGNTSK 581
 Db 423 SNLDNSFGKLSKENKDDMFQVTPV--SDVAARTEANAKRTGWTAGYIA-NGTNS 478

Qy 582 AYEQQAFDANRAEFDVDFANKSLTGKLIPTNTSSDCKS-AFDITATDNGFSGKANTP 640
 Db 479 GEASNQFTEGGNRAEFVDFSTKLSGT-----TAKDRTSPFTTAMIKDNGFSEVAKTG 535

Qy 641 DIETGGKIDSKNSSESGRVIYKDAVYIGFYGPQANBLLGGSFYKSN-DAGQNQDDSSAS 699
 Db 536 E--NGFALDPONTGNSHYTHEATVSGFPGKNALEMGSFSPPGNAFBGKQEK--AS 589

Qy 700 VVFGARKQOEYK 711

Query Match 25 6%; Score 950; DB 4; Length 601;
 Best Local Similarity 36.0%; Pred. No. 2.8e-60;
 Matches 242; Conservative 105; Mismatches 207; Indels 118; Gaps 26;

Qy 64 GGASSGTGAST-----QKPKYQDVTDPDKKKDEYSGIQPAMGYGVEKLRN--WIPOE 116
 Db 24 GGGSFIDDSVETQDMHSKPKYEDKSQPSQDVSNSGAAYGPAVKLPRRNHFNPKY 83

Qy 117 DKTALKALIEKVLDYDYLTSLAKPIYEKNINDSHDKQNKAARTDLKVKRSGYIYRSGYSNI 236
 Db 121 -----LIESKWD-----GOSRVGYNTFTYVRSGYVYLN-KNNI 154

Qy 237 DIQKIAKAKTGFDPGALPYKGQTAKOLPVSEVYKGTWDFMTDAKKGQSFSFERRA-GDR 295
 Db 155 DIKNNIVLFPGDGYLYKGKPKSPKSEKITYKGTWDDYVTDAMEKQFPEGLGSAAGGDK 214

Qy 296 YSAMSHHEYPSLTDQDKNPQDNYDEGHSSSEFTYDFSKKSLSLTGGLFSN--LQDHHKGK 352
 Db 215 SGALSALE-EGVLRNOAEASSGHTD-FGWTSEFEDFSKDTIKGTLYRNRRITONSENK 272

Qy 353 VTKTKRYDINARIGHGNRFRGSSATAINKDNESSAKHPPFTSDADNRLEGGFYGPNAEFLAGK 412 ;
 Db 273 QIKTTRYTIOATLHGHRFKGALAAK-GATNGSHFPLSDS-LEGGFGPKGSEFLAGK 330 ;
 Qy 413 FLDDDNKLFGVFGAKOSE-----AKETEAIIDAYALGTFENKSGTTNPAFTANSKEL 465 ;
 Db 331 FLSNDNKVAIFGAKQKDKODGENAAGPAETVIDAYI-----TGEFF---KKEQI 379 ;
 Qy 466 DNFGNINKLVLGSTDL---TGND---FVKTIDKEPKATTNQAGEPLTYNDKVRVOCC 521 ;
 Db 380 DSFGDVKLLDVGVEULSLPSSGNKAQFHIEQ-----NGYRATVCC 422 ;
 Qy 522 SNLEHLKPGSLSIGDSNSVPLQERTATGDKDAMPVAGNAKYRGCTWAGYVAGSGNTSK 581 ;
 Db 423 SNLDYMSFGKLSKENKDMDMFLQGVRTFV---SDVAARTEANAKYRGCTWAGYIA-NGTSNS 478 ;
 Qy 582 AYEAQOPADNANRAEFDVFKPLSITGKLNTPNTSSGKS-AFDITATDNGFSGKANTRP 640 ;
 Db 479 GEASNQFTEGNRAEFDDFSTKKSITGL---TAKDRTSPAFFITAMIKDONGFSGVAKTG 535 ;
 Qy 641 DIETGGKLKIDSKNSESGRIVYKDAIVTGGFYGPANOELGGSSFTYKSN-DAGNQDKDSSA 699 ;
 Db 536 R---NGFALDPTONGSHYTHEATVSGFYGKNAITEMGGSFSPGNAPEGKQBK---AS 589 ;
 Qy 700 VVFGARKQOEVK 711 ;
 Db 590 VVFGARKQOEVLQ 601 ;

RESULT 21
 US-09-059-584-26
 ; Sequence 26, Application US/09059584
 ; Patent No. 6440701
 ; GENERAL INFORMATION:
 ; APPLICANT: Myers, Lisa E
 ; APPLICANT: Schryvers, Anthony B
 ; APPLICANT: Harkness, Robbin E
 ; APPLICANT: Lossmore, Sheena M.
 ; APPLICANT: Du, Run-Pan
 ; APPLICANT: Yang, Yan-Ping
 ; APPLICANT: Klein, Michel H
 ; TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella
 ; NUMBER OF SEQUENCES: 60
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Sim & McBurney
 ; STREET: 6th Floor, 330 University Avenue
 ; CITY: Toronto
 ; STATE: Ontario
 ; COUNTRY: Canada
 ; ZIP: MSG 1R7
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent In Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/059,584
 ; FILING DATE: 14-APR-1998
 ; PRIORITY APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/778,570
 ; FILING DATE: 03-JAN-1997
 ; CLASSIFICATION:
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Stewart, Michael I
 ; REGISTRATION NUMBER: 24973
 ; REPERIENCE/DOCKET NUMBER: 1038-794
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (416) 595-1155
 ; INFORMATION FOR SEQ ID NO: 26:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 601 amino acids

Qy 25 6%; Score 950; DB 4; Length 601;
 Db 36 0%; Pred. No. 2.8e-60;
 Qy 26%; Mis matches 105; Indels 118; Gaps 26;
 Db 27%; Best Local Similarity 36.0%;
 Db 28%; Matches 242; Conservative 105;
 Qy 64 6%;
 Db 24 6%;
 Qy 117 6%;
 Db 84 6%;
 Qy 177 6%;
 Db 121 6%;
 Qy 237 6%;
 Db 155 6%;
 Qy 296 6%;
 Db 215 6%;
 Qy 353 6%;
 Db 273 6%;
 Qy 413 6%;
 Db 331 6%;
 Qy 466 6%;
 Db 380 6%;
 Qy 522 6%;
 Db 423 6%;
 Qy 582 6%;
 Db 479 6%;
 Qy 641 6%;
 Db 536 6%;
 Qy 700 6%;
 Db 590 6%;

RESULT 22
 US-08-448-194-61
 ; Sequence 61, Application US/08448194
 ; GENERAL INFORMATION:
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: JACOBS, Eric
 ; PATENT NO. 6028049
 ; APPLICANT: LEGRAIN, Michele
 ; APPLICANT: MZARIN, Veronique
 ; APPLICANT: BOUCHON-THESEN, Bernadette
 ; APPLICANT: SCHRYVERS, Anthony B.
 ; APPLICANT: BLOCH, Marie-Aline
 ; APPLICANT: CORRESPONDENCE ADDRESS:
 ; TITLE OF INVENTION: DNA FRAGMENTS CODING FOR THE TRANSFERRIN
 ; NUMBER OF SEQUENCES: 62
 ; CORRESPONDENCE ADDRESS:

ADDRESSE: Burns, Doane, Swecker & Mathis
 STREET: P.O. Box 1404
 CITY: Alexandria
 STATE: Virginia
 COUNTRY: United States
 ZIP: 22313-1404
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/448,194
 FILING DATE: 23-MAY-1995
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/361,469
 FILING DATE: 22-DEC-1994
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/078,053
 FILING DATE: 18-JUN-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: FR 92 07493
 FILING DATE: 19-JUN-1992
 ATTORNEY/AGENT INFORMATION:
 NAME: McGowan, Malcolm M.
 REGISTRATION NUMBER: 39,300
 REFERENCE/DOCKET NUMBER: 016100-005
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (703) 836-6620
 TELEFAX: (703) 836-2021
 INFORMATION FOR SEQ ID NO: 61:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 578 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 US-08-448-194-61

Query Match 25 4%; Score 942.5; DB 3; Length 578;
 Best Local Similarity 36.1%; Pred. No. 9.3e-60;
 Matches 242; Conservative 103; Mismatches 207; Indels 119; Gaps 26;

64 GGASSGTGAST-----QKPKYQDVPTDKKKDDEVSIGQEPAMGYVEKLRLN-WIPE 116
 Db 4 GGGSFELDSVETVQDMHSKPKYEDKSQPEQDVSSENQAYPAVKLPRNAHNPKY 63

Qy 117 QEEHAKINTNDVVKLEGDLKHNPFDNSIWONIQKNEKEVQTVYNEQKLENQIJKENKL 176
 Db 64 KE-----REKPLGSMWKKLQRGPB---NSFSDRDELEKKGSS- 100

Qy 177 DKTALKALIEKVLDLYTSLAKPIYEKNINDSHDKONKAPTRDKLYRSGYIYRSGYNSI 236
 Db 101 -----LIESKED-----GOSRVGXTNFTYVRSGYVYL-KNNI 134

Qy 237 DIQKIKIATKGDGALPYKGQTAKOLPVSEYKGTWDFMTDAKGQSFSFERRAGDRY 296
 Db 135 DIKNNVLFQGDGYLYKGKEPSKSEKITYKGTDYTDYTDAMEKQRFEGGSAAAGDGS 194

Qy 297 SAMSSHEYPSLTDKNNPKDNYNDEYGHSSFTVDFSKSLTGGLFSN---LQDEHKGKV 353
 Db 195 GALSAD-EGVLRNQEAASSHTD-FGMTSFEVDSDTKIGTLRNRTQNNSNQ 252

Qy 354 TKTKRDINARIHGNFRFGSATAINKDNEKAHKPFTSDADNRLEGGFVGPNAEFLAKF 413
 Db 253 IKTRTRIATLHGMRFKALAADK-GATNGSHPFTSDSDS-LEGGFVGPKGEBLAKF 310

Qy 414 LTDDNKLFLGUVGAKQSE---AKETEAIIDAYALGTFNKSGETTNPFTANSKKELD 466
 Db 311 LSNDKVAFAVSGAKQDKDGENAAAGPATETVIDAYRI-----TGEEF--KKEQID 359

Qy 467 NFGNINRNLVLSSTVIL--TOGND--FVKTLDEKEPATTTNQAGBPLTVNDKVRVQVCCS 522

RESULT 23
 US-08-867-921-61
 Sequence 61, Application US/08867921
 Patent No. 6326510
 GENERAL INFORMATION:
 APPLICANT: JACOBS, Eric
 APPLICANT: LEGRAIN, Michele
 APPLICANT: MAZARIN, Veronique
 APPLICANT: BOUCHON-THEISEN, Bernadette
 APPLICANT: SCHRYVERS, Anthony B.
 APPLICANT: BLOCH, Marie-Aline
 TITLE OF INVENTION: DNA ALIGMENTS CODING FOR THE TRANSFERRIN
 TITLE OF INVENTION: RECEPTOR OF NEISSERIA MENINGITIS
 NUMBER OF SEQUENCES: 62
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS
 STREET: P. O. Box 1404
 CITY: Alexandria
 STATE: VA
 COUNTRY: USA
 ZIP: 22313-1404
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentin Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/867,921
 FILING DATE: 03-JUN-1997
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/445,472
 FILING DATE: 22-MAY-1995
 APPLICATION NUMBER: US 08/361,469
 FILING DATE: 22-DEC-1994
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/078,053
 FILING DATE: 18-JUN-1993
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: FR 92 07493
 FILING DATE: 19-JUN-1992
 ATTORNEY/AGENT INFORMATION:
 NAME: McGowan, Malcolm K.
 REGISTRATION NUMBER: 39,300
 REFERENCE/DOCKET NUMBER: 016100-004
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (703) 836-2021
 INFORMATION FOR SEQ ID NO: 61:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 578 amino acids

;	TYPE: amino acid
;	STRANDEDNESS: Single
;	TOPOLogy: 1-linear
;	MOLECULE TYPE: DNA (genomic)
US-08-867-921-61	
Query Match	25.4% ; Score 942.5 ; DB 3 ; Length 578;
Best Local Similarity	36.1% ; Pred. No. 9.3e-60;
Matches 242; Conservative 103; Mismatches 207; Indels 119;	
Qy	64 GGASSGTGSAST-----OKPKYQDYPDTDKNKKDEVSQIOPBAMGYVELKLRN-
Db	4 GGGSFIDDSVETVQDMHSKPKYEDKSKOPESQQD/SENSGAAYGGAVKLPQRNNAF
Qy	117 QEEHAKINTNDVVKLEGDLKHNPFDNSIWQNIKNSKEVQTYTQNQEKQNIENQIK-
Db	64 KE-----RKPKLPSMDWKLQRESEP-----NSPSERDEBLEKCR
Qy	177 DTKALKALIEKVLKDYLTLSLAKPIYERNINDSHDICKONKARTDLKLYRSQGYIYS-
Db	101 -----LIESKWE-----GSRVUGYTNFVYVRSQSYVILN
Qy	237 DQKQKIAKTKGFDGALFYKGQTAKOLPVSEVKYKSTWDEMFTDAKGQSFSSEFRR-
Db	135 DIKNNIVLFGDGYLYKGKEPSKELPSEKITYKGWDYXTDAMMKQRPEGGSSAA
Qy	297 SAMSHEBPSLTLDDKNPDMYNDGHSSEFTDDESKSLTGGEFSN---LQDE-
Db	195 GALSALE-EGVLRNQAEASSGHTD-FGTMTESEFEVTFSDKTIKGTLYRNNTITONN-
Qy	354 TKTTRYDINARIHRGRGTSATAINNDNESTAKHPTSDADNRLEGGFGCPNAEE-
Db	253 IKTRTRYTQATLHGRFKGZLAADK-GATNGSHFPISDSDS-LEGGFGPKGEE-
Qy	414 LTDDDKLFLGFVGEAKOGESE-----AKETEAILDAYALGTFNKSCTTNPAFTANS-
Db	311 LSNDNFKVAAYFGAKQDKDGENAAGPATTVIDYRI-----TGEEF---K-
Qy	467 NFGNINKLVLGSTDVLDL-TQGND-FVKTIDKEKPATTINQAGEPLTNDKVR-
Db	360 SFGDYKLLVDGVELSLPSEGNAKAFOHQIEQ-----NGVRA
Qy	523 NLEHFKFGSLIGDMSNSVFOGERATKGDKDAMPVAGNAKYRTTWAGYVAGSG-
Db	403 NLDYNSFGKLSKENKDMDMFQGLQVRPV---SDVARTEANAKYRTTWGYIA--N-
Qy	583 YBAQQFADNANRAAEFDYDFANKSLTGKLIPNTSSDGKS-AFDTTATIDNGNGFSKQ-
Db	458 GEASIN-QEGGNRAEFDVDFSTKKSITL--TAKTRTSPFTTAMIKDNGFSGW-
Qy	642 IETGGKIDSKNSKSECRVIVKDAIYIGGFKGPQANBLGGFTYKSN-DAGNQDKD-
Db	514 ---NGFALDPONTGNSHYTHEATSGGGFIGKNALEMGSFSFPGNAFPBGKQEK-
Qy	701 VFGARKQQEYK 711
Db	568 VFGARKQQLVQ 578
RESULT 24	US-08-448-194-2
;	Sequence 2, Application US/08448194
;	Patent No. 6028049
;	GENERAL INFORMATION:
;	APPLICANT: JACOBS, Eric
;	APPLICANT: LEGRAN, Michèle
;	APPLICANT: MAZARIN, Véronique
;	APPLICANT: BOUCHON-THEISEN, Bernadette
;	APPLICANT: SCHRYVERS, Anthony B.
;	APPLICANT: BLOCH, Marie-Aline
;	TITLE OF INVENTION: DNA FRAGMENTS CODING FOR THE TRANSFERRIN
;	TITLE OF INVENTION: RECEPTOR OF NEISSERIA MENINGITIS
;	NUMBER OF SEQUENCES: 62

380 DSPGDVKLVLGVLSLSEBGNKAQFQHIEQ-----NGVATVCC 422
 522 SNLEHLKFGSLSIGDSNSVFLQGERTAKGDKDCKAMPVAGNAYKRTWAGYVAGSGNTSK 581
 423 SNLDMSFGSLSKENKDMDTQGVTRPV--SDVARTANAKYRTWIGIA--NGTSN 477
 582 AYEAQFADIANRAEDVDAFANKSLTGKL1PNTSSDGKS-AFDITATIDENGESKANTP 640
 478 SGEASN--QEGSNRAEDVDDSTKTSKIGL---TAKDRTSPAPFTAMIKONGFSGVAKTG 533
 641 DIETGLKLKISKNSEGRVIVRDAVIGGTYGPQANBLGGFTYGSN-DAGNQDUDSSA 699
 534 E--NGFALDPQNTGNSHYTHEATVSGGYFGKNAIEMGSSPSFPONAPPBKQEK--AS 587
 700 VVFGARKQOEVK 711
 588 VVFGAKRQQLNQ 599

RESULT 25
 Sequence 2, Application US/08867921
 Patent No. 6326350

GENERAL INFORMATION:
 APPLICANT: JACOBS, Eric
 APPLICANT: LEGRAIN, Michele
 APPLICANT: Mazarin, Veronique
 APPLICANT: BOUCHON-THEISEN, Bernadette
 APPLICANT: SCHRYVERS, Anthony B.
 APPLICANT: BLOCH, Marie-Aline
 TITLE OF INVENTION: DNA FRAGMENTS CODING FOR THE TRANSFERRIN
 TITLE OF INVENTION: RECEPTOR OF NEISSERIA MENINGITIDIS
 NUMBER OF SEQUENCES: 62
 CORRESPONDENCE ADDRESS:
 STREET: BURNS, DOANE, SWECKER & MATHIS
 CITY: Alexandria
 STATE: VA
 COUNTRY: USA
 ZIP: 22313-1404

COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0., Version #1.25

CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/867,921
 FILING DATE: 03-JUN-1997
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/445,472
 FILING DATE: 22-MAY-1995
 APPLICATION NUMBER: US 08/078,053
 FILING DATE: 18-JUN-1993
 CLASSIFICATION: 435

PRIOR APPLICATION DATA:
 APPLICATION NUMBER: FR 92 07493
 FILING DATE: 19-JUN-1992
 ATTORNEY AGENT INFORMATION:
 NAME: McGowan, Malcolm K.
 REGISTRATION NUMBER: 39,300
 TELECOMMUNICATION INFORMATION:
 TELEFAX: (703) 836-6620
 INFORMATION FOR SEQ ID NO: 2:
 LENGTH: 599 amino acids

TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-867-921-2

Query Match 25.3%; Score 937; DB 3; Length: 599;
 Best Local Similarity 36.2%; Pred. No. 2, 4e-59;
 Matches 243; Conservative 103; Mismatches 206; Indels 120; Gaps 27, 47;

Qy 64 GGASSGTSAST---QKPKYQDPTDKNKKDEVSGIQEPANCYGVELKLRN-WIPOE 116
 Db 24 GGGSFDLDSVETVQDMASKPKYEDERSOPESQDVSSENQSAAGTFAVLPKRNNAHFNPKY 83
 Qy 117 QEBHAKNTNDVVKLEGDLKENPFDNSIWQNIKNSKEVQTVNQEKONENQIKENKEL 176
 Db 84 KE---KHKPLGSMWDKKLQREGP----NSFSEDELEKGSSE- 120
 Db 121 -----LIESKED-----GQSRVVGTYNTFTYRSGYVYLN-KNNI 154
 Qy 177 DRTFALKALLEKVIDDLTSLAKPYYERNINDSKQNKAARTDJKYVTSQYIYTSQYSNI 236
 Db 121 -----LIESKED-----GQSRVVGTYNTFTYRSGYVYLN-KNNI 154
 Qy 237 DIOQKKAARTGFDGALFYKGTOTAKQLPVSEVKYKGTDKQGOSFSFERRA-GDR 295
 Db 155 DIKNNIVLGPDGYLYKGREPSKELPBERITYKGTDVTDANKQRFGLGSAGGDK 214
 Qy 296 YSAMSHSEBPSLITDQKNPDTNNDYGHSSSEFTVDFSKSLTGGLFSN--LQDHHKGK 352
 Db 215 SGALSALB-EGVLRNQABASSGHTD-FMTNTSEFDFTKSTLYRNRTONSENK 272
 Qy 353 VTKTKYDINARLHGNRPRGSAIAKNDNEKAKHPPFTSDADNLLEGFGYPNAEELAGK 412
 Db 273 QKTKTRTQATHNGRPFKGKALAADK-GATNGSHPPFSDSDS-LEGGYGPKEELAGK 330
 Qy 413 FLTDDNKLFGVFGAKQESE-----AKETEAIIIDAYALGTENKS GTTNPAAFTANSKKEI 465
 Db 331 FLNDNKVAAVFGAKQDKDGENAAGPATETIDAYR-----TCEEF----RKEQI 379
 Qy 466 DNSGNINKLVLGSTDYL-TQGND--FVKTIDKEKPATTNQAGPLEPTVNDKVRVQVCC 521
 Db 380 DSFGDVKKLLVGDYELSSLPSEGNTKAQFQHEIEQ-----NGYKATVCC 422
 Qy 522 SNUDEHLKFGSLSTGDSNVFLOQBRATPKGDKDKAMPVAGNAYKRTWAGYVAGSGNTSK 581
 Db 423 SNLDYMSFGKLSKENKDDMFLQGYTPV--SDVAARTEANAKYRTWGYIA-NGTSM 477
 Qy 582 AYEAQOFADNANRAEDVDFANKSLTGKL1PNTSSDGKS-AFDITATIDGNGFSGKANTP 640
 Db 478 SGASN-0EGGNAEFDVDFSTRK1SGTL--TAKDRTSPATFTAMIKDNGFSSVAKTG 533
 Qy 641 DIFTGGLKIDSKNSEGRVIVDAVIGGTYGPANEGLGGSFYTKSN-DAGNQDUDSSA 699
 Db 534 E--NGFALDPQNTGNSHYTHEATVSGGYFGKNAIEMGSSPSFPGNAPEGKQEK--AS 587
 Qy 700 VVFGARKQOEVK 711
 Db 588 VVFGAKRQQLNQ 599

RESULT 26
 US-08-487-830A-97
 Sequence 97 Application US/08487830A
 Patent No. 5705149

GENERAL INFORMATION:
 APPLICANT: Loosmore, Sheena
 APPLICANT: Harkness, Robin
 APPLICANT: Schryvers, Anthony
 APPLICANT: Chong, Pele
 APPLICANT: Gray-Owen, Scott
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Murdin, Andrew
 APPLICANT: Klein, Michel
 TITLE OF INVENTION: Transferrin Receptor Genes
 NUMBER OF SEQUENCES: 147

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COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US 08/487,890A
 FILING DATE: 07-JUN-1993
 CLASSIFICATION: 435

PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/175,116
 FILING DATE: 29-DEC-1993

PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/148,968
 FILING DATE: 08-NOV-1993

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INFORMATION FOR SEQ ID NO: 97:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 598 amino acids
 TYPE: amino acid
 STRANDNESS: single
 TOPOLOGY: linear

US 08-487-890A-97

Query Match 25.1%; Score 931.5; DB 1; Length 598;
 Best Local Similarity 36.2%; Pred. No. 6.1e-59; Mismatches 207; Indels 119; Gaps 27;
 Matches 243; Conservative 102; Length: 598

Matches 243; Score 931.5; DB 1; Length 598;

Qy 64 GGASSGTGAST-----QKPKYQDVTDKKKDEVSIGQEPAMGYVETKLRN--WIQE 116
 Db 24 GGGSFDISDVTQDMHSKPKXEDERSQDQDSENSGAYPAVKPRRNNAHNPVY 83

Qy 117 QEEHAKINTNDVVKLEGLDKRNPFDNSIWNQKNSKEVTVYNNQPKQNENQIKKENKL 176
 Db 84 KE-----RKHPLGSMDWKLQLQGP-----NSPSERDDELEKRGSSS- 120

Qy 177 DKTALKALIEKVLDYLTSLAKP1YEVKNDSHDKONKATRDLKTVRSGYTYRSGSYNI 236
 Db 121 -----LIEEKWED-----GOSRVVGTNTFYVRSQYVLAN-KNNI 154

Qy 237 DIOKKIAKTFGDGALFYKGQTAKOLPVSEYKKGSTWDFTDAKKQGQFSSFERRA-GDR 295
 Db 155 DIKNNIVLFGDGYLYKGKPSKPSKPEYKTYGTTWDYTDAMEKQFREGLSAAGDK 214

Qy 296 YSAMSSHEWPSLTLDKNPKPNYDNEYGHSSEFTUDSKSKSLTGLFSN--LQDHKGK 352
 Db 215 SGALSAL-EGYLRLNQAEASSGHTD-FGMTSBEFEVDFSDTKIGLYRNRRITONSENK 272

Qy 353 VTKTKEYDINARIGHNRGRFSATAINKDNEKAKHPTSDADNRLLEGFGYGPNAEELAGK 412
 Db 273 QIKTTRYTQATLHGRFGALADK-GATINGSFPIOSDS-LEGFGPGEELAGK 330

Qy 413 FLTDDNKLFGYFGAKQ-----ESEAKEYTAIDAYALGTFNKSCTTNPFAFTNSKELD 466
 Db 331 PLSNDKRAVAYFGAKOKDQKDKDGENAAGPATEVDAYR-----TGFEP-----KKEQID 379

Qy 467 NGNINKLVLQASSTVIDL-TGQND--FVKTIDKRPATINQAGEPLTNDKTRVQVCCS 522
 Db 380 SFGDVKLVLVDGVELSLLPSSEGKNAFAQHETEQ-----NGVKTAVCCS 422

Qy 523 NLEHUKFGSLSIGDONSVFLQGERTATKGDKDAMPVAGNAKYRGTWAGYVAGSSNTSKA 582
 Db 423 NLDIMSFGLKLSKENDKDMFLQGVRTPV--SDVAARTEANAKYRGTWGYIA--NGTSWS 477

Qy 583 YEQQQFADNANRAEFTDVFANKSLTGKLIPTNTSSGK5-AFDITATIDGNGFSGKANTPD 641
 Db 478 GEASNI-QEGNRAEFTDVFSTKTKSGLT--TAKDRTSPATITMIKONGFSGAKTGE 533

Qy 642 IETGGUKIDSKNSESGRVIWKAATWIGGYGPQANBLGSSFTYKSN-DAIGNQDKYSSA 700
 Db 534 ---NCFALDFQNTGNSHYTHEATVSGGFYGNATEMGGSSFSFPONAPESKQEK--ASV 587

CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US 08/487,890A
 FILING DATE: 07-JUN-1993
 CLASSIFICATION: 435

RESULT 27
 US-08-478-435-97
 ; Sequence No. 97, Application US/08478435
 ; Patent No. 592233

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 APPLICANT: Chong, Pele
 APPLICANT: Gray-Owen, Scott
 APPLICANT: Yang, Yan-Ping
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 ZIP: M5G 1R7
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US 08/478,435
 FILING DATE: 07-JUN-1995
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/337,483
 FILING DATE: 08-NOV-1994
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/175,116
 FILING DATE: 29-DEC-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/148,968
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 ATTORNEY/AGENT INFORMATION:
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 REGISTRATION NUMBER: 24,973
 REFERENCE/DOCKET NUMBER: 1038-462 MIS:vg
 TELEPHONE: (416) 595-1155
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 INFORMATION FOR SEQ ID NO: 97:
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 LENGTH: 598 amino acids
 TYPE: amino acid
 STRANDEDNESS: Single
 TOPOLOGY: linear
 US-08-478-435-97

Query Match 25.1%; Score 931.5; DB 2; Length 598;
 Best Local Similarity 36.2%; Pred. No. 6.1e-59; Gaps 27;
 Matches 243; Conservative 102; Mismatches 207; Indels 119; Gaps 27;

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G₁A₂S₃S₄T₅G₆S₇T₈A₉S₁₀A₁₁S₁₂T₁₃A₁₄S₁₅T₁₆A₁₇S₁₈T₁₉A₂₀S₂₁T₂₂A₂₃S₂₄T₂₅A₂₆S₂₇T₂₈A₂₉S₃₀T₃₁A₃₂S₃₃T₃₄A₃₅S₃₆T₃₇A₃₈S₃₉T₄₀A₄₁S₄₂T₄₃A₄₄S₄₅T₄₆A₄₇S₄₈T₄₉A₅₀S₅₁T₅₂A₅₃S₅₄T₅₅A₅₆S₅₇T₅₈A₅₉S₆₀T₆₁A₆₂S₆₃T₆₄A₆₅S₆₆T₆₇A₆₈S₆₉T₇₀A₇₁S₇₂T₇₃A₇₄S₇₅T₇₆A₇₇S₇₈T₇₉A₈₀S₈₁T₈₂A₈₃S₈₄T₈₅A₈₆S₈₇T₈₈A₈₉S₉₀T₉₁A₉₂S₉₃T₉₄A₉₅S₉₆T₉₇A₉₈S₉₉T₁₀₀A₁₀₁S₁₀₂T₁₀₃A₁₀₄S₁₀₅T₁₀₆A₁₀₇S₁₀₈T₁₀₉A₁₁₀S₁₁₁T₁₁₂A₁₁₃S₁₁₄T₁₁₅A₁₁₆S₁₁₇T₁₁₈A₁₁₉S₁₂₀T₁₂₁A₁₂₂S₁₂₃T₁₂₄A₁₂₅S₁₂₆T₁₂₇A₁₂₈S₁₂₉T₁₃₀A₁₃₁S₁₃₂T₁₃₃A₁₃₄S₁₃₅T₁₃₆A₁₃₇S₁₃₈T₁₃₉A₁₄₀S₁₄₁T₁₄₂A₁₄₃S₁₄₄T₁₄₅A₁₄₆S₁₄₇T₁₄₈A₁₄₉S₁₅₀T₁₅₁A₁₅₂S₁₅₃T₁₅₄A₁₅₅S₁₅₆T₁₅₇A₁₅₈S₁₅₉T₁₆₀A₁₆₁S₁₆₂T₁₆₃A₁₆₄S₁₆₅T₁₆₆A₁₆₇S₁₆₈T₁₆₉A₁₇₀S₁₇₁T₁₇₂A₁₇₃S₁₇₄T₁₇₅A₁₇₆S₁₇₇T₁₇₈A₁₇₉S₁₈₀T₁₈₁A₁₈₂S₁₈₃T₁₈₄A₁₈₅S₁₈₆T₁₈₇A₁₈₈S₁₈₉T₁₉₀A₁₉₁S₁₉₂T₁₉₃A₁₉₄S₁₉₅T₁₉₆A₁₉₇S₁₉₈T₁₉₉A₂₀₀S₂₀₁T₂₀₂A₂₀₃S₂₀₄T₂₀₅A₂₀₆S₂₀₇T₂₀₈A₂₀₉S₂₁₀T₂₁₁A₂₁₂S₂₁₃T₂₁₄A₂₁₅S₂₁₆T₂₁₇A₂₁₈S₂₁₉T₂₂₀A₂₂₁S₂₂₂T₂₂₃A₂₂₄S₂₂₅T₂₂₆A₂₂₇S₂₂₈T₂₂₉A₂₃₀S₂₃₁T₂₃₂A₂₃₃S₂₃₄T₂₃₅A₂₃₆S₂₃₇T₂₃₈A₂₃₉S₂₄₀T₂₄₁A₂₄₂S₂₄₃T₂₄₄A₂₄₅S₂₄₆T₂₄₇A₂₄₈S₂₄₉T₂₅₀A₂₅₁S₂₅₂T₂₅₃A₂₅₄S₂₅₅T₂₅₆A₂₅₇S₂₅₈T₂₅₉A₂₆₀S₂₆₁T₂₆₂A₂₆₃S₂₆₄T₂₆₅A₂₆₆S₂₆₇T₂₆₈A₂₆₉S₂₇₀T₂₇₁A₂₇₂S₂₇₃T₂₇₄A₂₇₅S₂₇₆T₂₇₇A₂₇₈S₂₇₉T₂₈₀A₂₈₁S₂₈₂T₂₈₃A₂₈₄S₂₈₅T₂₈₆A₂₈₇S₂₈₈T₂₈₉A₂₉₀S₂₉₁T₂₉₂A₂₉₃S₂₉₄T₂₉₅A₂₉₆S₂₉₇T₂₉₈A₂₉₉S₃₀₀T₃₀₁A₃₀₂S₃₀₃T₃₀₄A₃₀₅S₃₀₆T₃₀₇A₃₀₈S₃₀₉T₃₁₀A₃₁₁S₃₁₂T₃₁₃A₃₁₄S₃₁₅T₃₁₆A₃₁₇S₃₁₈T₃₁₉A₃₂₀S₃₂₁T₃₂₂A₃₂₃S₃₂₄T₃₂₅A₃₂₆S₃₂₇T₃₂₈A₃₂₉S₃₃₀T₃₃₁A₃₃₂S₃₃₃T₃₃₄A₃₃₅S₃₃₆T₃₃₇A₃₃₈S₃₃₉T₃₄₀A₃₄₁S₃₄₂T₃₄₃A₃₄₄S₃₄₅T₃₄₆A₃₄₇S₃₄₈T₃₄₉A₃₅₀S₃₅₁T₃₅₂A₃₅₃S₃₅₄T₃₅₅A₃₅₆S₃₅₇T₃₅₈A₃₅₉S₃₆₀T₃₆₁A₃₆₂S₃₆₃T₃₆₄A₃₆₅S₃₆₆T₃₆₇A₃₆₈S₃₆₉T₃₇₀A₃₇₁S₃₇₂T₃₇₃A₃₇₄S₃₇₅T₃₇₆A₃₇₇S₃₇₈T₃₇₉A₃₈₀S₃₈₁T₃₈₂A₃₈₃S₃₈₄T₃₈₅A₃₈₆S₃₈₇T₃₈₈A₃₈₉S₃₉₀T₃₉₁A₃₉₂S₃₉₃T₃₉₄A₃₉₅S₃₉₆T₃₉₇A₃₉₈S₃₉₉T₄₀₀A₄₀₁S₄₀₂T₄₀₃A₄₀₄S₄₀₅T₄₀₆A₄₀₇S₄₀₈T₄₀₉A₄₁₀S₄₁₁T₄₁₂A₄₁₃S₄₁₄T₄₁₅A₄₁₆S₄₁₇T₄₁₈A₄₁₉S₄₂₀T₄₂₁A₄₂₂S₄₂₃T₄₂₄A₄₂₅S₄₂₆T₄₂₇A₄₂₈S₄₂₉T₄₃₀A₄₃₁S₄₃₂T₄₃₃A₄₃₄S₄₃₅T₄₃₆A₄₃₇S₄₃₈T₄₃₉A₄₄₀S₄₄₁T₄₄₂A₄₄₃S₄₄₄T₄₄₅A₄₄₆S₄₄₇T₄₄₈A₄₄₉S₄₅₀T₄₅₁A₄₅₂S₄₅₃T₄₅₄A₄₅₅S₄₅₆T₄₅₇A₄₅₈S₄₅₉T₄₆₀A₄₆₁S₄₆₂T₄₆₃A₄₆₄S₄₆₅T₄₆₆A₄₆₇S₄₆₈T₄₆₉A₄₇₀S₄₇₁T₄₇₂A₄₇₃S₄₇₄T₄₇₅A₄₇₆S₄₇₇T₄₇₈A₄₇₉S₄₈₀T₄₈₁A₄₈₂S₄₈₃T₄₈₄A₄₈₅S₄₈₆T₄₈₇A₄₈₈S₄₈₉T₄₉₀A₄₉₁S₄₉₂T₄₉₃A₄₉₄S₄₉₅T₄₉₆A₄₉₇S₄₉₈T₄₉₉A₅₀₀S₅₀₁T₅₀₂A₅₀₃S₅₀₄T₅₀₅A₅₀₆S₅₀₇T₅₀₈A₅₀₉S₅₁₀T₅₁₁A₅₁₂S₅₁₃T₅₁₄A₅₁₅S₅₁₆T₅₁₇A₅₁₈S₅₁₉T₅₂₀A₅₂₁S₅₂₂T₅₂₃A₅₂₄S₅₂₅T₅₂₆A₅₂₇S₅₂₈T₅₂₉A₅₃₀S₅₃₁T₅₃₂A₅₃₃S₅₃₄T₅₃₅A₅₃₆S₅₃₇T₅₃₈A₅₃₉S₅₄₀T₅₄₁A₅₄₂S₅₄₃T₅₄₄A₅₄₅S₅₄₆T₅₄₇A₅₄₈S₅₄₉T₅₅₀A₅₅₁S₅₅₂T₅₅₃A₅₅₄S₅₅₅T₅₅₆A₅₅₇S₅₅₈T₅₅₉A₅₆₀S₅₆₁T₅₆₂A₅₆₃S₅₆₄T₅₆₅A₅₆₆S₅₆₇T₅₆₈A₅₆₉S₅₇₀T₅₇₁A₅₇₂S₅₇₃T₅₇₄A₅₇₅S₅₇₆T₅₇₇A₅₇₈S₅₇₉T₅₈₀A₅₈₁S₅₈₂T₅₈₃A₅₈₄S₅₈₅T₅₈₆A₅₈₇S₅₈₈T₅₈₉A₅₉₀S₅₉₁T₅₉₂A₅₉₃S₅₉₄T₅₉₅A₅₉₆S₅₉₇T₅₉₈A₅₉₉S₆₀₀T₆₀₁A₆₀₂S₆₀₃T₆₀₄A₆₀₅S₆₀₆T₆₀₇A₆₀₈S₆₀₉T₆₁₀A₆₁₁S₆₁₂T₆₁₃A₆₁₄S₆₁₅T₆₁₆A₆₁₇S₆₁₈T₆₁₉A₆₂₀S₆₂₁T₆₂₂A₆₂₃S₆₂₄T₆₂₅A₆₂₆S₆₂₇T₆₂₈A₆₂₉S₆₃₀T₆₃₁A₆₃₂S₆₃₃T₆₃₄A₆₃₅S₆₃₆T₆₃₇A₆₃₈S₆₃₉T₆₄₀A₆₄₁S₆₄₂T₆₄₃A₆₄₄S₆₄₅T₆₄₆A₆₄₇S₆₄₈T₆₄₉A₆₅₀S₆₅₁T₆₅₂A₆₅₃S₆₅₄T₆₅₅A₆₅₆S₆₅₇T₆₅₈A₆₅₉S₆₆₀T₆₆₁A₆₆₂S₆₆₃T₆₆₄A₆₆₅S₆₆₆T₆₆₇A₆₆₈S₆₆₉T₆₇₀A₆₇₁S₆₇₂T₆₇₃A₆₇₄S₆₇₅T₆₇₆A₆₇₇S₆₇₈T₆₇₉A₆₈₀S₆₈₁T₆₈₂A₆₈₃S₆₈₄T₆₈₅A₆₈₆S₆₈₇T₆₈₈A₆₈₉S₆₉₀T₆₉₁A₆₉₂S₆₉₃T₆₉₄A₆₉₅S₆₉₆T₆₉₇A₆₉₈S₆₉₉T₇₀₀A₇₀₁S₇₀₂T₇₀₃A₇₀₄S₇₀₅T₇₀₆A₇₀₇S₇₀₈T₇₀₉A₇₁₀S₇₁₁T₇₁₂A₇₁₃S₇₁₄T₇₁₅A₇₁₆S₇₁₇T₇₁₈A₇₁₉S₇₂₀T₇₂₁A₇₂₂S₇₂₃T₇₂₄A₇₂₅S₇₂₆T₇₂₇A₇₂₈S₇₂₉T₇₃₀A₇₃₁S₇₃₂T₇₃₃A₇₃₄S₇₃₅T₇₃₆A₇₃₇S₇₃₈T₇₃₉A₇₄₀S₇₄₁T₇₄₂A₇₄₃S₇₄₄T₇₄₅A₇₄₆S₇₄₇T₇₄₈A₇₄₉S₇₅₀T₇₅₁A₇₅₂S₇₅₃T₇₅₄A₇₅₅S₇₅₆T₇₅₇A₇₅₈S₇₅₉T₇₆₀A₇₆₁S₇₆₂T₇₆₃A₇₆₄S₇₆₅T₇₆₆A₇₆₇S₇₆₈T₇₆₉A₇₇₀S₇₇₁T₇₇₂A₇₇₃S₇₇₄T₇₇₅A₇₇₆S₇₇₇T₇₇₈A₇₇₉S₇₈₀T₇₈₁A₇₈₂S₇₈₃T₇₈₄A₇₈₅S₇₈₆T₇₈₇A₇₈₈S₇₈₉T₇₉₀A₇₉₁S₇₉₂T₇₉₃A₇₉₄S₇₉₅T₇₉₆A₇₉₇S₇₉₈T₇₉₉A₈₀₀S₈₀₁T₈₀₂A₈₀₃S₈₀₄T₈₀₅A₈₀₆S₈₀₇T₈₀₈A₈₀₉S₈₀₁₀T₈₀₁₁A₈₀₁₂S₈₀₁₃T₈₀₁₄A₈₀₁₅S₈₀₁₆T₈₀₁₇A₈₀₁₈S₈₀₁₉T₈₀₂₀A₈₀₂₁S₈₀₂₂T₈₀₂₃A₈₀₂₄S₈₀₂₅T₈₀₂₆A₈₀₂₇S₈₀₂₈T₈₀₂₉A₈₀₃₀S₈₀₃₁T₈₀₃₂A₈₀₃₃S₈₀₃₄T₈₀₃₅A₈₀₃₆S₈₀₃₇T₈₀₃₈A₈₀₃₉S₈₀₄₀T₈₀₄₁A₈₀₄₂S₈₀₄₃T₈₀₄₄A₈₀₄₅S₈₀₄₆T₈₀₄₇A₈₀₄₈S₈₀₄₉T₈₀₅₀A₈₀₅₁S₈₀₅₂T₈₀₅₃A₈₀₅₄S₈₀₅₅T₈₀₅₆A₈₀₅₇S₈₀₅₈T₈₀₅₉A₈₀₆₀S₈₀₆₁T₈₀₆₂A₈₀₆₃S₈₀₆₄T₈₀₆₅A₈₀₆₆S₈₀₆₇T₈₀₆₈A₈₀₆₉S₈₀₇₀T₈₀₇₁A₈₀₇₂S₈₀₇₃T₈₀₇₄A₈₀₇₅S₈₀₇₆T₈₀₇₇A₈₀₇₈S₈₀₇₉T₈₀₈₀A₈₀₈₁S₈₀₈₂T₈₀₈₃A₈₀₈₄S₈₀₈₅T₈₀₈₆A₈₀₈₇S₈₀₈₈T₈₀₈₉A₈₀₉₀S₈₀₉₁T₈₀₉₂A₈₀₉₃S₈₀₉₄T₈₀₉₅A₈₀₉₆S₈₀₉₇T₈₀₉₈A₈₀₉₉S₈₀₁₀₀T₈₀₁₀₁A₈₀₁₀₂S₈₀₁₀₃T₈₀₁₀₄A₈₀₁₀₅S₈₀₁₀₆T₈₀₁₀₇A₈₀₁₀₈S₈₀₁₀₉T₈₀₁₁₀A₈₀₁₁₁S₈₀₁₁₂T₈₀₁₁₃A₈₀₁₁₄S₈₀₁₁₅T₈₀₁₁₆A₈₀₁₁₇S₈₀₁₁₈T₈₀₁₁₉A₈₀₁₂₀S₈₀₁₂₁T₈₀₁₂₂A₈₀₁₂₃S₈₀₁₂₄T₈₀₁₂₅A₈₀₁₂₆S₈₀₁₂₇T₈₀₁₂₈A₈₀₁₂₉S₈₀₁₃₀T₈₀₁₃₁A₈₀₁₃₂S₈₀₁₃₃T₈₀₁₃₄A₈₀₁₃₅S₈₀₁₃₆T₈₀₁₃₇A₈₀₁₃₈S₈₀₁₃₉T₈₀₁₄₀A₈₀₁₄₁S₈₀₁₄₂T₈₀₁₄₃A₈₀₁₄₄S₈₀₁₄₅T₈₀₁₄₆A₈₀₁₄₇S₈₀₁₄₈T₈₀₁₄₉A₈₀₁₅₀S₈₀₁₅₁T₈₀₁₅₂A₈₀₁₅₃S₈₀₁₅₄T₈₀₁₅₅A₈₀₁₅₆S₈₀₁₅₇T₈₀₁₅₈A₈₀₁₅₉S₈₀₁₆₀T₈₀₁₆₁A₈₀₁₆₂S₈₀₁₆₃T₈₀₁₆₄A₈₀₁₆₅S₈₀₁₆₆T₈₀₁₆₇A₈₀₁₆₈S₈₀₁₆₉T₈₀₁₇₀A₈₀₁₇₁S₈₀₁₇₂T₈₀₁₇₃A₈₀₁₇₄S₈₀₁₇₅T₈₀₁₇₆A₈₀₁₇₇S₈₀₁₇₈T₈₀₁₇₉A₈₀₁₈₀S₈₀₁₈₁T₈₀₁₈₂A₈₀₁₈₃S₈₀₁₈₄T₈₀₁₈₅A₈₀₁₈₆S₈₀₁₈₇T₈₀₁₈₈A₈₀₁₈₉S₈₀₁₉₀T₈₀₁₉₁A₈₀₁₉₂S₈₀₁₉₃T₈₀₁₉₄A₈₀₁₉₅S₈₀₁₉₆T₈₀₁₉₇A₈₀₁₉₈S₈₀₁₉₉T₈₀₂₀₀A₈₀₂₀₁S₈₀₂₀₂T₈₀₂₀₃A₈₀₂₀₄S₈₀₂₀₅T₈₀₂₀₆A₈₀₂₀₇S₈₀₂₀₈T₈₀₂₀₉A₈₀₂₁₀S₈₀₂₁₁T₈₀₂₁₂A₈₀₂₁₃S₈₀₂₁₄T₈₀₂₁₅A₈₀₂₁₆S₈₀₂₁₇T₈₀₂₁₈A₈₀₂₁₉S₈₀₂₂₀T₈₀₂₂₁A₈₀₂₂₂S₈₀₂₂₃T₈₀₂₂₄A₈₀₂₂₅S₈₀₂₂₆T₈₀₂₂₇A₈₀₂₂₈S₈₀₂₂₉T₈₀₂₃₀A₈₀₂₃₁S₈₀₂₃₂T₈₀₂₃₃A₈₀₂₃₄S₈₀₂₃₅T₈₀₂₃₆A₈₀₂₃₇S₈₀₂₃₈T₈₀₂₃₉A₈₀₂₄₀S₈₀₂₄₁T₈₀₂₄₂A₈₀₂₄₃S₈₀₂₄₄T₈₀₂₄₅A₈₀₂₄₆S₈₀₂₄₇T₈₀₂₄₈A₈₀₂₄₉S₈₀₂₅₀T₈₀₂₅₁A₈₀₂₅₂S₈₀₂₅₃T₈₀₂₅₄A₈₀₂₅₅S₈₀₂₅₆T₈₀₂₅₇A₈₀₂₅₈S₈₀₂₅₉T₈₀₂₆₀A₈₀₂₆₁S₈₀₂₆₂T₈₀₂₆₃A₈₀₂₆₄S₈₀₂₆₅T₈₀₂₆₆A₈₀₂₆₇S₈₀₂₆₈T₈₀₂₆₉A₈₀₂₇₀S₈₀₂₇₁T₈₀₂₇₂A₈₀₂₇₃S₈₀₂₇₄T₈₀₂₇₅A₈₀₂₇₆S₈₀₂₇₇T₈₀₂₇₈A₈₀₂₇₉S₈₀₂₈₀T₈₀₂₈₁A₈₀₂₈₂S₈₀₂₈₃T₈₀₂₈₄A₈₀₂₈₅S₈₀₂₈₆T₈₀₂₈₇A₈₀₂₈₈S₈₀₂₈₉T₈₀₂₉₀A₈₀₂₉₁S₈₀₂₉₂T₈₀₂₉₃A₈₀₂₉₄S₈₀₂₉₅T₈₀₂₉₆A₈₀₂₉₇S₈₀₂₉₈T₈₀₂₉₉A₈₀₃₀₀S₈₀₃₀₁T₈₀₃₀₂A₈₀₃₀₃S₈₀₃₀₄T₈₀₃₀₅A₈₀₃₀₆S₈₀₃₀₇T₈₀₃₀₈A₈₀₃₀₉S₈₀₃₁₀T₈₀₃₁₁A₈₀₃₁₂S₈₀₃₁₃T₈₀₃₁₄A₈₀₃₁₅S₈₀₃₁₆T₈₀₃₁₇A₈₀₃₁₈S₈₀₃₁₉T₈₀₃₂₀A₈₀₃₂₁S₈₀₃₂₂T₈₀₃₂₃A₈₀₃₂₄S₈₀₃₂₅T₈₀₃₂₆A₈₀₃₂₇S₈₀₃₂₈T₈₀₃₂₉A₈₀₃₃₀S₈₀₃₃₁T₈₀₃₃₂A₈₀₃₃₃S₈₀₃₃₄T₈₀₃₃₅A₈₀₃₃₆S₈₀₃₃₇T₈₀₃₃₈A₈₀₃₃₉S₈₀₃₄₀T₈₀₃₄₁A₈₀₃₄₂S₈₀₃₄₃T₈₀₃₄₄A₈₀₃₄₅S₈₀₃₄₆T₈₀₃₄₇A₈₀₃₄₈S₈₀₃₄₉T₈₀₃₅₀A₈₀₃₅₁S₈₀₃₅₂T₈₀₃₅₃A₈₀₃₅₄S₈₀₃₅₅T₈₀₃₅₆A₈₀₃₅₇S₈₀₃₅₈T₈₀₃₅₉A₈₀₃₆₀S₈₀₃₆₁T₈₀₃₆₂A₈₀₃₆₃S₈₀₃₆₄T₈₀₃₆₅A₈₀₃₆₆S₈₀₃₆₇T₈₀₃₆₈A₈₀₃₆₉S₈₀₃₇₀T₈₀₃₇₁A₈₀₃₇₂S₈₀₃₇₃T₈₀₃₇₄A₈₀₃₇₅S₈₀₃₇₆T₈₀₃₇₇A₈₀₃₇₈S₈₀₃₇₉T₈₀₃₈₀A₈₀₃₈₁S₈₀₃₈₂T₈₀₃₈₃A₈₀₃₈₄S₈₀₃₈₅T₈₀₃₈₆A₈₀₃₈₇S₈₀₃₈₈T₈₀₃₈₉A₈₀₃₉₀S₈₀₃₉₁T₈₀₃₉₂A₈₀₃₉₃S₈₀₃₉₄T₈₀₃₉₅A₈₀₃₉₆S₈₀₃₉₇T₈₀₃₉₈A₈₀₃₉₉S₈₀₄₀₀T₈₀₄₀₁A₈₀₄₀₂S₈₀₄₀₃T₈₀₄₀₄A₈₀₄₀₅S₈₀₄₀₆T₈₀₄₀₇A₈₀₄₀₈S₈₀₄₀₉T₈₀₄₁₀A₈₀₄₁₁S₈₀₄₁₂T₈₀₄₁₃A₈₀₄₁₄S₈₀₄₁₅T₈₀₄₁₆A₈₀₄₁₇S₈₀₄₁₈T₈₀₄₁₉A₈₀₄₂₀S₈₀₄₂₁T₈₀₄₂₂A₈₀₄₂₃S₈₀₄₂₄T₈₀₄₂₅A₈₀₄₂₆S₈₀₄₂₇T₈₀₄₂₈A₈₀₄₂₉S₈₀₄₃₀T₈₀₄₃₁A₈₀₄₃₂S₈₀₄₃₃T₈₀₄₃₄A₈₀₄₃₅S₈₀₄₃₆T₈₀₄₃₇A₈₀₄₃₈S₈₀₄₃₉T₈₀₄₄₀A₈₀₄₄₁S₈₀₄₄₂T₈₀₄₄₃A₈₀₄₄₄S₈₀₄₄₅T₈₀₄₄₆A₈₀₄₄₇S₈₀₄₄₈T₈₀₄₄₉A₈₀₄₅₀S₈₀₄₅₁T₈₀₄₅₂A₈₀₄₅₃S₈₀₄₅₄T₈₀₄₅₅A₈₀₄₅₆S₈₀₄₅₇T₈₀₄₅₈A₈₀₄₅₉S₈₀₄₆₀T₈₀₄₆₁A₈₀₄₆₂S₈₀₄₆₃T₈₀₄₆₄A₈₀₄₆₅S₈₀₄₆₆T₈₀₄₆₇A₈₀₄₆₈S₈₀₄₆₉T₈₀₄₇₀A₈₀₄₇₁S₈₀₄₇₂T₈₀₄₇₃A₈₀₄₇₄S₈₀₄₇₅T₈₀₄₇₆A₈₀₄₇₇S₈₀₄₇₈T₈₀₄₇₉A<sub

Qy 701 VFGARKQOEVK 711
 Db 598 VFGARKRQLVQ 598

RESULT 29
 Sequence 97, Application US/08478373
 Patent No. 552841
 GENERAL INFORMATION:
 APPLICANT: Loosmore, Sheena
 APPLICANT: Harkness, Robin
 APPLICANT: Schryvers, Anthony
 APPLICANT: Chong, Pele
 APPLICANT: Gray-Owen, Scott
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Mardian, Andrew
 APPLICANT: Klein, Michel
 TITLE OF INVENTION: Transferrin Receptor Genes
 NUMBER OF SEQUENCES: 147
 CORRESPONDENCE ADDRESS:
 ADDRESSEES: Sim & McBurney
 STREET: Suite 701, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: M5G 1R7

COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/M3-DOS
 SOFTWARE: Patent in Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US 08/478,373
 FILING DATE: 07-JUN-1995
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/337,483
 FILING DATE: 08-NOV-1994
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/175,116
 FILING DATE: 29-DEC-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/148,968
 FILING DATE: 08-NOV-1993
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24,973
 REFERENCE/DOCKET NUMBER: 1038-463 MIS:vg
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 97:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 598 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-478-373-97

Qy 177 DKTALKALIEKVLDPLTSLAKPIYEKVNINDSHDKQNKKARTDRDLKXVRSGYIYRGYSNI
 Db 121 ----- -LESKWE----- -GOSRVVGYTNTFYVRSSYYVLN -RNNI
 Qy 237 DIOKKIAKTGFDFGALFYKGTTOTAKOLPVSEVKYKGTTWDFTMDAKKGQSFSSEFERRA -GDR 295
 Db 155 DIKNNIVLFGSPDGYYKKGRPSKELPSERKITYKOTWYTDAMIKQRFFGLGSAGGD
 Qy 296 YSAMSSHEFPLSLTDRNRPDNYEGRSEFTVDFSKSLTGLFLSN -- -LQHDKGK 352
 Db 215 SGALSALE -EGVLRNQAEASSGHT -FGMTSEFEVDFSDKTIKGTLYRNTRITONSENK 272
 Qy 353 VTKTRYDINARIRGNRFRGSATANKONESKAKHPTSDADNRLLEGFFYGPNAEFLAGK 412
 Db 273 QIKTRTRYQTQTLGNSRFRKALLADK -GATNGSHPPFISDS -LEGGFVGPKGEBLAGK 330
 Qy 413 FLTDDNKLFGVFGAKQ ----- -ESFAKETEAIIDAYALGTFNKSCTTNPAFTANSKKELD 466
 Db 331 FLSNNNKVAEQQAKQDKKDGENAAGPATEVIDYRI ----- -TGEFF -- -KKEQID 379
 Qy 467 NFGNNKLVLGSTVIDL -- -TQGND -- -FVTIDKEKAPATTINQAGPLTNDKVRVQVCCS 522
 Db 380 SFGDVKLVLGVBSLSESEGNAFAQHEIEQ ----- -NGVKTVCSS 422
 Qy 523 NLEHFKFGSLSIGDENSVFLQGERTAKGDKDAMPVAGNAKYRGTWAGYVAGSGNTSKA 582
 Db 423 NLDNFSFGKLSKENDDMFLQGVTRPV -- -SDVARTAENAKYRGTWAGYIA -- -NGTSWS 477
 Qy 583 YEAAQFADVANRABFDVDFANKSLTGKLIPNTSSDGKS -AFDTITATDNGNGFSCKANTPD 641
 Db 478 GEASN -QEGNRABEDVDESTKLSGTL -- -TAKRTSPFTITAMIKONGFSGAKTGE 533
 Qy 642 IETGOKLIDSKNSKSEGRVIVKDAIIVGGFVGPANEIGSFTYKSN -DAGNQDKESSASV 700
 Db 534 -- -NGFALDQNTGSHYTHEATVSGGFYVKNAITEMGGSFSFPENAPESKQEK -- -ASV 587
 Qy 701 VFGARKQQEVK 711
 Db 588 VFGARKQQLVQ 598

RESULT 30
 US-08-478-671-97
 ; Sequence 97, Application US/08474671
 ; GENERAL INFORMATION:
 ; Patent No. 6008346
 ;
 ; APPLICANT: Losmore, Sheena
 ; NAME: Losmore, Sheena
 ; APPLICANT: Harkness, Robin
 ; NAME: Harkness, Robin
 ; APPLICANT: Schryvers, Anthony
 ; NAME: Schryvers, Anthony
 ; APPLICANT: Chong, Pele
 ; NAME: Chong, Pele
 ; APPLICANT: Gray-Owen, Scott
 ; NAME: Gray-Owen, Scott
 ; APPLICANT: Yang, Yan-Ping
 ; NAME: Yang, Yan-Ping
 ; APPLICANT: Mardian, Andrew
 ; NAME: Mardian, Andrew
 ; APPLICANT: Klein, Michel
 ; NAME: Klein, Michel
 ; TITLE OF INVENTION: Transferrin Receptor Genes
 ; NUMBER OF SEQUENCES: 147
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEES: Sim & McBurney
 ; STREET: Suite 701, 330 University Avenue
 ; CITY: Toronto
 ; STATE: Ontario
 ; COUNTRY: Canada
 ; ZIP: M5G 1R7
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent In Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/474671
 ; FILING DATE: 08-NOV-1994
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Stewart, Michael I
 ; REGISTRATION NUMBER: 24,973
 ; REFERENCE/DOCKET NUMBER: 1038-463 MIS:vg
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (416) 595-1155
 ; TELEFAX: (416) 595-1163
 ; INFORMATION FOR SEQ ID NO: 97:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 598 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; US-08-478-373-97

Query Match 25.1%; Score 931.5; DB 2; Length 598;
 Best Local Similarity 36.2%; Pred. No. 6.1e-59; Mismatches 207; Indels 119; Gaps 27;
 Matches 243; Conservative 102;

Qy 64 GGASSGTGAST-----QKPKYQDVPTDNNKDKDEVSIGQEPAMGYVVELKRN - WIQE 116
 Db 24 GGGSPFDLSVQDMHSKPKYEDERSQPSQQDVSENSGAYGAVKLPRRNAAHENPKV 83

Qy 117 QEEHAKINTNDVVKLEGDLKHNPFDNSTIWNQNSKEVQTVYQNEQKNTENQIKKENKEI 176
 Db 84 KE----- -KHKPLGSMWDKKLQRGEP----- -NSFSERDELEKRGSSS -

PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/337,483
 FILING DATE: 08-NOV-1994
 CLASSIFICATION: 530
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/175,116
 FILING DATE: 29-DEC-1993
 REGISTRATION NUMBER: 24,973
 PRIORITY NUMBER: 1038-465 MIS:vg
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 97:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 598 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-474-671-97

Query Match 25.1%; Score 931.5; DB 3; Length 598;
 Best Local Similarity 36.2%; Pred. No. 6.1e-59;
 Matches 243; Conservative 102; Nismatches 207; Indels 119; Gaps 27;

Qy 64 GGASSGTGAST-----QKPKYDQVPTDKKQKDEVSQGIEPAMGYGVELKLRN--WIPOE 116
 Db 24 GGGSPFDLSDVETVQDMHSKPKYEDEKQSQQDVSSENSGAAAYFAVQLPDRRNAHNPKV 83

Qy 117 QEEHAKINTNDVVKLEGDLKHNPNFDSIWNQNKNSKEVQTYVQNEQKQNENQIKKENKL 176
 Db 84 KB-----KEKPLKPSMDWKLQRGEP----NSFSEDELEKRGSSB- 120

Qy 177 DKTALKALIEKVLDLTLTSLAKPIYEKVNINDSHDVKRTRDLYKVRSGYVYSGYSNI 236
 Db 121 -----LIESKWD-----GSSRVEGYTNFTYVRSQCVYLN-KNNI 154

Qy 237 DQKRIKAKTGFDGALFYKGQTOKOLPVSEVKYKGWTDFMTDAKKGQSFSFERRA-GDR 295
 Db 155 DIKNNIVLFGDGLYKKGKEPSKELPSKETYKGWTDFMTDAKEKQRFEGLGSAAAGDK 214

Qy 296 YSAMSSHEYPSLTDKKNKDNYNDEYGHSESEFTYDFSKSLTGFESN---LQDHHKSK 352
 Db 215 SGALSAL-EGVLRNQAEASGHTD-FGMTESEFYDFSKTIGKTYLNRNRTQNSER 272

Qy 353 VTKTAKYDINARIGHNRFRSSATAINKDNESKAKHPFTSDADNLEGGFTGPNAEELAGK 412
 Db 273 QIKTTRYTQATLHGNRFRKSKALADK-GATNGSHPFISDSDS-LEGFTGPKGEELAGK 330

Qy 413 FLTDDNKLFGYFGAKO----ESEAKEYTAAILDAYALGFENKSGTNTNPAFTANSKELD 466
 Db 331 FLSNDNKVAAVFGAKOKDDGENAAGPATEVIDAYR-----TGBEF---KKEQID 379

Qy 467 NFGNINKLVLGTVSTVDL---TQGND--FVKTIDKEPATTINQAGBPLTVNDKVRQVCCS 522
 Db 380 SFGDYRKLLVQGVELSLLPSQGNKQAFQHIEQ-----NGVRAVVCSS 422

Qy 523 NLEHLKPGSLSIGDMSVFLQGERTATGKDQKAMPVAGNAKYRTWAGVAGSGNTSKA 582
 Db 423 NLDMNSFGKLSKENKDMLQGVTRPV--SDVAARTEANAKYRTWGYIA--NGTNSNS 477

Qy 583 YEQQPFDANRAEFDVDFANKSLTGKLPNTSSQGKS-AFDITATIDGFSGRANTPD 641
 Db 478 GEASN-QEGGNRAEFDVDFSTKKGTL---TAKDRTSPAFFITAMIKONGFSGVAKTGE 533

Qy 642 IETGGKIDNSNSSEGRVITYKDAITGGFVGPQANBLGGSFYTKSN-DIGNQDKDSSAY 700
 Db 534 --NGFALDPONTGNSHYTHIATVSGFTGKNA1EMGGSFSPGNAPPBKQEK--ASV 587

Qy 701 VFGARKQQEVK 711
 Db 588 VFGARKQOLQ 598

RESULT 31
 US-08-483-577A-97
 ; Sequence 97, Application US/08483577A
 ; Patent No. 6015688

GENERAL INFORMATION:
 APPLICANT: Losmore, Sheena
 APPLICANT: Harkness, Robin
 APPLICANT: Schryvers, Anthony
 APPLICANT: Chong, Pele
 APPLICANT: Gray-Owen, Scott
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Mardin, Andrew
 APPLICANT: Klein, Michael
 TITLE OF INVENTION: Transferrin Receptor Genes
 NUMBER OF SEQUENCES: 160
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Sim & McBarney
 STREET: Suite 701, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: MSG 1R7

COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/483-577A
 FILING DATE: 07-JUN-1995
 CLASSIFICATION: 435

PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/337,483
 FILING DATE: 08-NOV-1994
 PRIORITY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 FILING DATE: 07-JUN-1995
 APPLICATION NUMBER: US 08/175,116
 FILING DATE: 29-DEC-1993
 PRIORITY/DOCKET NUMBER: 1038-511
 REFERENCE/DOCKET NUMBER: 1038-511
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 SEQUENCE CHARACTERISTICS:
 LENGTH: 598 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-483-577A-97

Query Match 25.1%; Score 931.5; DB 3; Length 598;
 Best Local Similarity 36.2%; Pred. No. 6.1e-59;
 Matches 243; Conservative 102; Nismatches 207; Indels 119; Gaps 27;

Qy 64 GGASSGTGAST-----QKPKYDQVPTDKKQKDEVSQGIEPAMGYGVELKLRN-WIPOE 116
 Db 24 GGGSPFDLSDVETVQDMHSKPKYEDEKQSQQDVSSENSGAAAYFAVQLPDRRNAHNPKV 83

Qy 117 QEEHAKINTNDVVKLEGDLKHNPNFDSIWNQNKNSKEVQTYVQNEQKQNENQIKKENKL 176
 Db 84 KB-----KEKPLKPSMDWKLQRGEP----NSFSEDELEKRGSSB- 120

Qy 177 DKTALKALIEKVLDLTLTSLAKPIYEKVNINDSHDVKRTRDLYKVRSGYVYSGYSNI 236
 Db 121 -----LIESKWD-----GSSRVEGYTNFTYVRSQCVYLN-KNNI 154

Qy 237 DQKRIKAKTGFDGALFYKGQTOKOLPVSEVKYKGWTDFMTDAKKGQSFSFERRA-GDR 295
 Db 155 DIKNNIVLFGDGLYKKGKEPSKELPSKETYKGWTDFMTDAKEKQRFEGLGSAAAGDK 214

Qy 296 YSAMSSHEYPSLTDKKNKDNYNDEYGHSESEFTYDFSKSLTGFESN---LQDHHKSK 352
 Db 215 SGALSAL-EGVLRNQAEASGHTD-FGMTESEFYDFSKTIGKTYLNRNRTQNSER 272

Qy 353 VTKTAKYDINARIGHNRFRSSATAINKDNESKAKHPFTSDADNLEGGFTGPNAEELAGK 412
 Db 273 QIKTTRYTQATLHGNRFRKSKALADK-GATNGSHPFISDSDS-LEGFTGPKGEELAGK 330

Qy 413 FLTDDNKLFGYFGAKO----ESEAKEYTAAILDAYALGFENKSGTNTNPAFTANSKELD 466
 Db 331 FLSNDNKVAAVFGAKOKDDGENAAGPATEVIDAYR-----TGBEF---KKEQID 379

Qy 467 NFGNINKLVLGTVSTVDL---TQGND--FVKTIDKEPATTINQAGBPLTVNDKVRQVCCS 522
 Db 380 SFGDYRKLLVQGVELSLLPSQGNKQAFQHIEQ-----NGVRAVVCSS 422

Qy 523 NLEHLKPGSLSIGDMSVFLQGERTATGKDQKAMPVAGNAKYRTWAGVAGSGNTSKA 582
 Db 423 NLDMNSFGKLSKENKDMLQGVTRPV--SDVAARTEANAKYRTWGYIA--NGTNSNS 477

Qy 583 YEQQPFDANRAEFDVDFANKSLTGKLPNTSSQGKS-AFDITATIDGFSGRANTPD 641
 Db 478 GEASN-QEGGNRAEFDVDFSTKKGTL---TAKDRTSPAFFITAMIKONGFSGVAKTGE 533

Qy 642 IETGGKIDNSNSSEGRVITYKDAITGGFVGPQANBLGGSFYTKSN-DIGNQDKDSSAY 700
 Db 534 --NGFALDPONTGNSHYTHIATVSGFTGKNA1EMGGSFSPGNAPPBKQEK--ASV 587

Qy 701 VFGARKQQEVK 711
 Db 588 VFGARKQOLQ 598

Query Match 25.1%; Score 931.5; DB 3; Length 598;
 Best Local Similarity 36.2%; Pred. No. 6.1e-59;
 Matches 243; Conservative 102; Nismatches 207; Indels 119; Gaps 27;

Qy 64 GGASSGTGAST-----QKPKYDQVPTDKKQKDEVSQGIEPAMGYGVELKLRN-WIPOE 116
 Db 24 GGGSPFDLSDVETVQDMHSKPKYEDEKQSQQDVSSENSGAAAYFAVQLPDRRNAHNPKV 83

Qy 117 QEEHAKINTNDVVKLEGDLKHNPNFDSIWNQNKNSKEVQTYVQNEQKQNENQIKKENKL 176
 Db 84 KB-----KEKPLKPSMDWKLQRGEP----NSFSEDELEKRGSSB- 120

Qy 177 DKTALKALIEKVLDLTLTSLAKPIYEKVNINDSHDVKRTRDLYKVRSGYVYSGYSNI 236

QY 701 VFGARKQQEVK 711
 Db 588 VFGARKQQLVQ 598

RESULT 33
 US-08-637-654-97
 Sequence 97, Application US/08637654
 Patent No. 6358727
 GENERAL INFORMATION:
 APPLICANT: Loosmore, Sheena M
 Schryvers, Anthony B
 Harkness, Robin E
 APPLICANT: Loosmore, Sheena M
 Schryvers, Anthony B
 Harkness, Robin E
 APPLICANT: Chong, Pele
 Gray-Owen, Scott
 Yang, Yan-Ping
 APPLICANT: Mardin, Andrew D
 Klein, Michael H
 APPLICANT: Mardin, Andrew D
 Klein, Michael H
 TITLE OF INVENTION: HAEMOPHILUS TRANSFERRIN RECEPTOR GENES
 NUMBER OF SEQUENCES: 147
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Sim & McBurney
 STREET: 6th Floor, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: M5G 1R7
 COMPUTER READABLE FORM:
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentin Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/637,654
 FILING DATE: 05-AUG-1996
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: PCT/CA94/00616
 FILING DATE:
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24,973
 REFERENCE/DOCKET NUMBER: 1038-595
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 SEQUENCE FOR SEQ ID NO: 97:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 598 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-637-654-97

Query Match 25.1%; Score 931.5; DB 3; Length 598;
 Best Local Similarity 36.2%; Pred. No. 6.1e-59;
 Matches 243; Conservative 102; Mismatches 207; Indels 119; Gaps 27;

QY 64 GGASGGTGGAST-----QKPKYQVPTDQNKDKBVGQIPEAMGYVKEVLKRN--WIPE 116
 Db 24 GGGSPFDLDSVETVQDMHSKPKYEDKEQSOPESQDVSSENCSAAVGFAVKLPRRNNAHNPVY 83

QY 117 QEEHAKINTNDVVKLEGDLKHNPDPDNIWONIKNRSKEYVTVYNEQKQENQTKKENKL 176
 Db 84 KE-----KHKPLGSMMDWKLQRGEP---NSFSERDELEKRGSSS- 120

QY 177 DKTALKALIKVLDLTLSLAKPIYEKNTINDSHQKQSSFERRA-CIR 295

Db 121 -----LISKWED-----GOSRVVYGTNTFVYRGSYVYLN-KNNI 154

QY 155 DIKINTVLSFSPDGYKYYKGSBPSKSKPLSPEKITYKSTWDDYKTDANEKOREPGLGSRAAGK 214

QY 296 YSAMSSHEPSLITTDKNPDPDNTDVSFSKSLTGGFLFSN---LQDHHKCK 352
 Db 215 SGASALE-BGVLRNQAEASSGHT-FGNTSEPPDFDSRKTIGTLYRNRRNRTINSENK 272

QY 353 VTKTKYDINARIHGNRPGSATIAKONESKAKHPTSDADNBLLEGFFYGPNAEFLAGK 412
 Db 273 QIKTRTRTQATLHGNRPGKALADK-GATNGSHPFSDSDS-LEGGFYGPKEELACK 330

QY 413 FLTDNDKLFQFGVGAHQ-----ESBAKETEALIADAYALGTFNKGTTNPAFTANSKKELD 466
 Db 331 FLSNDNCKYAVFGBKQDKDQGNAAGPATENDAYRI-----TGEFF--KKEQD 379

QY 467 NFGNTINKLVLIGSTVLDL--TGQND--FVTKTDEKEPATTTNQACEPLTNDKVRQVCCS 522
 Db 380 SFGDVKLJLVDGVLBSLIPSEGNAKAFOHEIEQ-----NGVKAUTVCCS 422

QY 523 NIEHUKFGSLSIGDSNSVFLQGERTATKGDKDQKAMPVAGNAYVAGSNTSKA 582
 Db 423 NLDMISGKLSKENKDDMELQGVTTPV--SDVARTTEANAKYRGTWGYIA--NGTWS 477

QY 583 YEAOQFDANNAEADFDPEAKS1TGKL1PNTSSDGKS-AFDATATIDNGFSKANPD 641
 Db 478 GEARW-QEGNQRAFBFDVDPSTKISGTI-TAKDRTSRAFTTAMXNDNGFSKVARKE 533

QY 642 IETGGLKIDSNSGRVIVKDA1V1GFFYGPQANELGGSFTYKSN-DAGNODKDSASSV 700
 Db 534 ---NGFALDQNTNSHITYEATVSGGFYGRNAEMGGSFSFSPGNAPEGKQEK---ASV 587

RESULT 34
 US-08-637-654-97
 Sequence 97, Application US/08649518
 Patent No. 6361779
 GENERAL INFORMATION:
 APPLICANT: Loosmore, Sheena
 APPLICANT: Harkness, Robin
 APPLICANT: Schryvers, Anthony
 APPLICANT: Chong, Pele
 APPLICANT: Gray-Owen, Scott
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Mardin, Andrew
 APPLICANT: Klein, Michael
 TITLE OF INVENTION: Transferrin Receptor Genes
 NUMBER OF SEQUENCES: 160
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Sim & McBurney
 STREET: 6th Floor, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: M5G 1R7
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentin Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 FILING DATE: 17-MAY-1996
 APPLICATION NUMBER: US/08/649,518
 CLASSIFICATION: 536
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US 08/337,483
 FILING DATE: 08-NOV-1994
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US 08/483,577
 FILING DATE: 07-JUN-1995
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US 08/175,116

FILING DATE:	29-DEC-1993
PRIOR APPLICATION DATA:	
APPLICATION NUMBER:	US 08/148,968
FILING DATE:	08-NOV-1993
ATTORNEY/AGENT INFORMATION:	
NAME: Stewart, Michael I	
REGISTRATION NUMBER: 24,973	
REFERENCE/DOCKET NUMBER: 1038-608	
TELECOMMUNICATION INFORMATION:	
TELEPHONE: (416) 595-1155	
TELEFAX: (416) 595-1163	
TELEFAX:	
INFORMATION FOR SEQ ID NO: 97:	
SEQUENCE CHARACTERISTICS:	
LENGTH: 598 amino acids	
TYPE: amino acid	
STRANDEDNESS: single	
TOPOLOGY: linear	
US-08-649-518-97	
Query Match 25.1%; Score 931.5; DB 3; Length 598;	
Best Local Similarity 36.2%; Pred. No. 6.1e-59; Mismatches 207; Indels 119; Gaps 27;	
Matches 243; Conservative 102; Mismatches 207; Indels 119; Gaps 27;	
Dy 64 GGAGSGTGGSAST ---QKQKQDPTDNRKQDKFDSGQEPAMGIVGELKRN--WIPQE 116	
Db 24 GGGSFSDLSTETVQDMHSKCKYEDKRSQPEQQDYESNSGAAYGFAVKLPRRNAAHNPKY 83	
Dy 117 QEEHAKINTNDVVKLLEGDLKHNPFDNSIWQNIKNSKEVQTYNQEOKONIQIKKENKEL 176	
Db 84 KE -----RHKPLQSMWDWKLQRGP-----NSFPERDELEYKRSSE- 120	
Dy 177 DKTAALKALIEKVLDQYLTSLAKPIYEKNTNDSHDKONKARTDRDLKYSRSGYIYRSYSNI 236	
Db 121 -----LIESKWD-----GQRRVGGTNTFVRSQGTVLN-KNNI 154	
Dy 237 DQKQKAKTGFQDGAFLYKQFTQAKQDLPSEYKQGKWDFTMDAKKQFSFSFERRA GDR 295	
Db 155 DIKNNVILFSPDGVLYKKGREPSKELPSKSEKITYKGTWWDYTDVTAMEKQRFEGSLSAAGGDK 214	
Dy 296 YSAMSSHEYPSLLTDQNKEDDNYDQHGSSEFTVDFSKSLSLGGFLFSN--LQDHHKGK 352	
Db 215 SGASLASE-EGVLRNQAEASGHTD-FGMSBEFEVFSDKTIGTLYRNNTQINNSENK 272	
Dy 353 VTKTKRVDINARIHGNRFRGSSATAINKDNESKAKHFTSDADNRRLGGFYGPNAEFLAK 412	
Db 273 QIKTRTRYTOAHLHRNFRGSKALAIDK-GATINGSHFISDS-LEGGFYGPKGEBLAKG 330	
Dy 413 FLTDNNKLFPGVFGAKO-----ESAKETEALIDDAALGTGPNKSGTINPAFTANSRKE 466	
Db 331 FLSNDNKVAAVFGAKQDKDGENAAGPATEVIDARYI-----TGEEF--KKEQID 379	
Dy 467 NFGNTNKLVLGSTVLDL--TQGND--FVKTIDKEKPATTNQAGEBLTVNDKVRVQYCCS 522	
Db 380 SFGDVKRLLDGVLSLLPSEGNKAQFQEIQ-----NGVKAVVCCS 422	
Dy 523 NLEHKFGSLSIGDSNSVFLQGERTATKGDKDQKAMPVAGNAYKRGTWAGYAGSGNTSKA 582	
Db 423 NLDMSFGKLSEKNDMFLQGVTRV-----SDVAARTEANAYKRGTWYGTIA--NGTSWS 477	
Dy 583 YEAQADNANRAFDVDFANKSLTQGLLINTSSDKS-ADPITATIDGNGPSGRANTPD 641	
Db 478 GEASN- QEGGNRAFDVDFSTKKS1SGTLL--TAKDFTSPATTITAMKDNFGSGVAKTGE 533	
Dy 642 IETGGLKIDSKNSSEGRVITYKDAIYGGFYGPQANEGLGGSFTYKSN-DAGNQDKDSEASV 700	
Db 534 ---NGFALDQNTGNSHYTHEATVGGFYGRNATEMGGSFSPGNAPEGRQEK--ASV 587	
Dy 701 VEGARKQOBYK 711	
Db 588 VEGAKRQOLVQ 598	

349 HKGGKVTKTKRYDINARIHGNRFRGSAATINQDNESKAHCBFITSADNRLLEGFFYGPNAEE408

277 RNKAQEVTKRYSIEADIAGNRFRGKAKA-----EKAGDPIFTDS-NYLEGGFYGPKAEE 329
 Qy 409 LAGKFPLTDNKLFGVYGAKESEAKETEAILDAYALGTGNKSGTNTNPAFTANSKELDNP 468
 Db 330 MAGKPTNNKSLFAVAKSENGETTERIDA-----TKIDITQFNAKELNN 378
 Qy 469 GNIKLUVLGSTVIDLTOQHDF-----VKTIDKEKPATTNQAGEBLTVDKVRVOV-CCSNLB 525
 Db 379 GDASVLIDGKORIDA-GNFKNSKTE-----INGKTMVACCSNL 421
 Qy 526 HLFKGSL-----SIGDSENSVFLGGERATKGDKDAMPVAGNAKYRTWAGYVAGSN 578
 Db 422 YMKFGLWKEGKQVYKD-NSLFLQGERAT-----DK-IPAGGNYKVVGTWDALV--SKG 473
 Qy 579 TSKAYEAQOFADNANRAEFDYDFANKSLTGRKLIPNTSSDGKSAFDITATIDGNGFSKRN 638
 Db 474 TNWIAEADNNEREGRTFEDNFSDKVKGKLFDKGGVN--PVFTVDAITNGNFIGSSK 531
 Qy 639 TPDIEGGLKIDSKNSEGRVIVKDAIVTGGFYGPONELGGSFTYKSNDAQNDKDSSA 698
 Db 532 TSD---SGFALDAGSSQHGNAVFSQD1KVNQGFGTAGEGQPHHKSD-----NGV 581
 Qy 699 SVVFGARKQOE 709
 Db 582 GAVFGAKRQTE 592

RESULT 36
 US-08-217-438-4
 / Sequence 4, Application US/08217438
 / Patent No. 5521072
 / GENERAL INFORMATION:
 / APPLICANT: Potter, Andrew A.
 / APPLICANT: Gerlach, Gerald F.
 / APPLICANT: Willson, Philip J.
 / APPLICANT: Rossi-Campos, Amalia
 / TITLE OF INVENTION: ACTINOBACILLUS PLEUROPNEUMONIAE
 / TITLE OF INVENTION: TRANSFERRIN BINDING PROTEINS AND USES THEREOF
 / NUMBER OF SEQUENCES: 11
 / CORRESPONDENCE ADDRESS:
 / ADDRESSEE: Reed & Robins
 / STREET: 635 Bryant Street
 / CITY: Palo Alto
 / STATE: California
 / COUNTRY: USA
 / ZIP: 94301
 / COMPUTER READABLE FORM:
 / MEDIUM TYPE: Floppy disk
 / COMPUTER: IBM PC compatible
 / OPERATING SYSTEM: PC-DOS/MS-DOS
 / SOFTWARE: PatentIn Release #1.0, Version #1.25
 / CURRENT APPLICATION DATA:
 / APPLICATION NUMBER: US/08/217,438
 / FILING DATE: 22-MAR-1994
 / CLASSIFICATION: 435
 / ATTORNEY/AGENT INFORMATION:
 / NAME: Robins, Roberta L.
 / REGISTRATION NUMBER: 33-208
 / REFERENCE/DOCKET NUMBER: 9001-0015.01
 / TELECOMMUNICATION INFORMATION:
 / TELEPHONE: 415-617-8999
 / TELEFAX: 415-327-3231
 / INFORMATION FOR SEQ ID NO: 4:
 / SEQUENCE CHARACTERISTICS:
 / LENGTH: 593 amino acids
 / TYPE: amino acid
 / STRANDEDNESS: single
 / TOPOLOGY: linear

US-08-217-438-4
 / Sequence 5, Application US/08217438
 / Patent No. 5521072
 / GENERAL INFORMATION:
 / APPLICANT: Potter, Andrew A.
 / APPLICANT: Gerlach, Gerald F.
 / APPLICANT: Willson, Philip J.
 / APPLICANT: Rossi-Campos, Amalia
 / TITLE OF INVENTION: ACTINOBACILLUS PLEUROPNEUMONIAE
 / TITLE OF INVENTION: TRANSFERRIN BINDING PROTEINS AND USES THEREOF
 / NUMBER OF SEQUENCES: 11
 / CORRESPONDENCE ADDRESS:
 / ADDRESSEE: Reed & Robins
 / STREET: 635 Bryant Street
 / CITY: Palo Alto
 / STATE: California
 / COUNTRY: USA

Matches 252; Conservative 88; Mismatches 227; Indels 164; Gaps 28;
 Qy 3 HIPITLVCVAISAVYLTAAGGSGSNNPAPTP1PNAGGAGNAASGGAGSTD-NAANAG 61
 Db 2 HKLNPYALAFTSILFLVAC-----SGGKGSFDELDVREN 35
 Qy 62 STGGAASSGTGSASTQPKYQDPVTPDKNKDEVSGLQEPAMGYGYELKURNWIQEQQEHA 121
 Db 36 QTAKEAKAT-----YQDBETKCKTKEBLDKLMEPALGYETQILERNKAP--KTETG 86
 Db 122 KINTNDVVKLEGDLKHNPDPNS1WQNIKNSKEYQTVYNEQKONIENQKKENKELDKTAL 181
 Qy 87 EKRNERVVELSED-----KLTLYQESVELIPH-----LDE--- 117
 Db 182 KALIEKVLDYLTLAKP1YEQKINSDHDKQNKAARTDLYKVRSGYIYRSGSNI--DI 238
 Db 118 -----LNKTTS-----NDVYSHSDSKRLDKNRLDLYKVRSGYVYDGSFNEIRRND 163
 Qy 239 QKIAKTGFDGALPYKGTQTAKOLPVSEY-KYKGTDWFMTDACKGQSFSSFERA-GDRY 296
 Db 164 GFHVKQGDGYVYLGTPSKV1SYKWTWDVPSNINLRELDGFDTSGGKRN 223
 Qy 297 SAMSSHEYPSLLTDDKNPDPDNYNDEYG-----HSSBPTYDFSKKSLTGGFLFSNLQDH 348
 Db 224 SATS-----ITETVNRDHVKVGKDNVEKGVAHSSEFAVDENDKLTGSLYRNGTIN 276
 Qy 349 HKGVTKTKRVDINARIHGNRFRGSSATA1KDNESEKAHPFTDADNRLEGGFVGPNAE 408
 Db 277 RNIKAQEVTRKYSTIEDIAGNFRGKAKA-----EKAGDPIFTDS-NYLEGGFYGPKAEE 329
 Qy 409 LAGKPLTDDNKLFGVFGAKQESEARETEAILDAYALGTENKSGTNTPAFTANSKELDNF 468
 Db 330 MAGFETNNKSLFAVAKSENGETTERIDA-----TKIDLTQFNAKELNN 378
 Qy 469 GNINKVLGSLTVIDLTQGNDP-----VKTIDKEKPATTNQAGEPLTVNDKVRVOV-CCSNL 525
 Db 379 GDASTVLITQDKQDILA-GYNFKNSKTV-----INGKTMVAVACCSNL 421
 Qy 526 HLFKFSL-----SIGDENSNSVFLQGERATKGDKDAMPVAGNAKYRTWAGYVAGSGN 578
 Db 422 YMKEFQOLWQKEGKQVKD-NSLFLQGERAT-----DK-MPAGGNYKYYGTWDLV--SKG 473
 Qy 579 TSKAYAQOQDANNAEFDVDPANKS1TGKL1PTNQSSDQKSAFDITATIDGNGFSGRKAN 638
 Db 474 TNWIAEADNRESGRTEFDVNSKRYKNGKLPDKGGVN--PVFTVDAITNGEFTGSAK 531
 Qy 639 TPDIEGGLKIDSKNSEGRVIVKDAIVTGGFYGPQANELGGSFYKSNNDAGNQDKDSSA 698
 Db 532 TSD---SGFALDAGSSQHGNAVFSQD1KVNQGFGTAGEGQPHHKSD-----NGSV 581
 Qy 699 SVVFGARKQOE 709
 Db 582 GAVFGAKRQTE 592

RESULT 37
 US-08-217-438-5
 / Sequence 5, Application US/08217438
 / Patent No. 5521072
 / GENERAL INFORMATION:
 / APPLICANT: Potter, Andrew A.
 / APPLICANT: Gerlach, Gerald F.
 / APPLICANT: Willson, Philip J.
 / APPLICANT: Rossi-Campos, Amalia
 / TITLE OF INVENTION: ACTINOBACILLUS PLEUROPNEUMONIAE
 / TITLE OF INVENTION: TRANSFERRIN BINDING PROTEINS AND USES THEREOF
 / NUMBER OF SEQUENCES: 11
 / CORRESPONDENCE ADDRESS:
 / ADDRESSEE: Reed & Robins
 / STREET: 635 Bryant Street
 / CITY: Palo Alto
 / STATE: California
 / COUNTRY: USA

Query Match Similarity 24.6%; Score 913; DB 1; Length 593;
 Best Local Similarity 34.5%; Pred. No. 1.3e-57;

COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent in Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/217,438
 FILING DATE: 22-MAR-1994
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: Robins, Roberta L.
 ADDRESS: 33, 208
 REFERENCE/DOCKET NUMBER: 9001-0015.01
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 415-617-8939
 TELEFAX: 415-327-3231
 TELEX:
 INFORMATION FOR SEQ ID NO: 5:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 593 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-217-438-5

Query Match 24 6%; Score 913; DB 1; Length 593;
 Best Local Similarity 34.5%; Pred. No. 1.3e-57;
 Matches 252; Conservative 88; Matches 227; Indels 164; Gaps 28;

Query 3 HIPILTCVVAISAVLTLTACGSGGSNPPAPPPIPAGAGNAGSGTGGASTD-NAANAG 61
 Database 2 HFKLNPYALAFSLFLVAC-
 Query 62 STGGASSGTGASASTQPKYQDVPDKNKDEVSQTCIOPACYGVELKLRMWIPQEQQEHA 121
 Database 36 QTAKAAKATTS-----YQDBETKKTKEFLDKLMPEALGYETQILRMRKAP--KTEG 86
 Query 122 KINTNDVVKLEGDLKHNPFDSIWIQNIKNSKEVOTVYNNQEKONIQNIKENKELDTKL 181
 Database 87 EKRNERYVVELSBD-----KITYQESVIIIPH-----LDE---117
 Query 182 KALIEKVLDDYLTSLAKPIYKVNNDSHKONKARTDLYKVRSGYIYRGYSNI--DI 238
 Database 118 -----LNGKTT-----NDVTHSHDSKRLDKNDLYKVRSGYVYDGSFNEIERRNDS 163
 Query 239 QRKIAKTGFDGALFYKGTQATQKLPVSEV-KXKGITWDFTMDAKKGOSFSFERRA-GDRY 296
 Database 164 GFHVFVQGIDGVYVYLGVTSPKELPKGVISYKGITWDFTVSNMINLEREIDFDTSGDGRKV 223
 Query 297 SAMSSEHYPSPSLTDDKPKDNYNDEY-----HSSEFTVDFSKSKSLTGGLFNSNLODH 348
 Database 224 SATS-----ITETYNRDLHKVGKEGLDNEYTKVGAHSSEFAVDFNKKLJTSLYRNGYN 276
 Query 349 HKGKTKTKYRDINARIHGNEPRGSTATIKNDESKAKHPPTSADNRLKGGFYGPNAEE 408
 Database 277 RNKAQEVTKRYSIEADIAQNEFRKAKA-----EKAQDPLFTDS-NYLEGGFYGPKAEE 329
 Query 409 LAGKFLTDNKLFLGFVGAKQSEAKETEALDAYALGTFNKSQTGNTPAFTANSKCKELDNF 468
 Database 330 MAGKFFTNKSLPAVPAAKSNGEETTERIDA-----TKIDLTQFNAKELNMF 378
 Query 469 GNINKLVLGSTVTDI.TQGNDP-----VKTIDKEKPATTNQAGPRLTYNDKVRVQV-GCSNIB 525
 Database 379 GDASVLLIDGOKIDLAA-GVNPKNKSTV-----INGKTMVAVCCSNLE 421
 Query 526 HLKPGSL-----S1GDSNSVFLQCBRTATKGDKDAMPYAGNAKYRGWTWAGYAGSGN 578
 Database 422 YMKGFLQWQKESQKQVKD-NSLFLQCBRTAT-----DK-MPAGGNYKVGWDAV-SKG 473
 Query 579 TSKAYAQQFADNANFAEFDYDANKSLTGLI.PNTSSDGKSAFDITATDNGFSGKAN 638
 Database 474 TNWIAEDNRESGYRTEFDVNSDKKNGKLFDKGVN--PVFTYDATINGNFTGSAK 531

Query Match 24 6%; Score 913; DB 1; Length 593;
 Best Local Similarity 34.5%; Pred. No. 1.3e-57;
 Matches 252; Conservative 88; Mismatches 227; Indels 164; Gaps 28;

RESULT 38
 US-08-487-890A-100
 Sequence 100, Application US/08487890A
 Patent No. 570819
 GENERAL INFORMATION:
 / APPLICANT: Loosmore, Sheena
 / APPLICANT: Harkness, Robin
 / APPLICANT: Schryvers, Anthony
 / APPLICANT: Chong, Pele, Scott
 / APPLICANT: Gray-Owen, Scott
 / APPLICANT: Yang, Yan-Ping
 / APPLICANT: Mordin, Andrew
 / APPLICANT: Klein, Michael
 / TITLE OF INVENTION: Transferrin Receptor Genes
 / NUMBER OF SEQUENCES: 147
 / CORRESPONDENCE ADDRESS:
 / ADDRESSEE: Sim & McBurney
 / STREET: 6th Floor, 330 University Avenue
 / CITY: Toronto
 / STATE: Ontario
 / COUNTRY: Canada
 / ZIP: MSG 1R7
 / COMPUTER READABLE FORM:
 / MEDIUM TYPE: Floppy disk
 / COMPUTER: IBM PC compatible
 / OPERATING SYSTEM: PC-DOS/MS-DOS
 / SOFTWARE: PatentIn Release #1.0, Version #1.25
 / CURRENT APPLICATION DATA:
 / APPLICATION NUMBER: US/08/487,890A
 / FILING DATE: 07-JUN-1993
 / CLASSIFICATION: 435
 / PRIOR APPLICATION DATA:
 / APPLICATION NUMBER: US 08/175,116
 / FILING DATE: 29-DEC-1993
 / PRIOR APPLICATION DATA:
 / APPLICATION NUMBER: US 08/148,968
 / FILING DATE: 08-NOV-1993
 / ATTORNEY/AGENT INFORMATION:
 / NAME: Stewart, Michael I
 / REGISTRATION NUMBER: 24,973
 / REFERENCE/DOCKET NUMBER: 1038-466 MIS:jb
 / TELECOMMUNICATION INFORMATION:
 / TELEPHONE: (416) 595-1155
 / TELEFAX: (416) 595-1163
 / INFORMATION FOR SEQ ID NO: 100:
 / SEQUENCE CHARACTERISTICS:
 / LENGTH: 593 amino acids
 / TYPE: amino acid
 / STRANDEDNESS: single
 / TOPOLOGY: linear
 / US-08-487-890A-100

Query Match 3 HIPILTCVVAISAVLTLTACGSGGSNPPAPPPIPAGAGNAGSGTGGASTD-NAANAG 61
 Database 2 HFKLNPYALAFSLFLVAC-----
 Query 62 STGGASSGTGASASTQPKDNYNDEY-----HSSEFTVDFSKSKSLTGGLFNSNLODH 348
 Database 379 GDASVLLIDGOKIDLAA-GVNPKNKSTV-----INGKTMVAVCCSNLE 421
 Query 526 HLKPGSL-----S1GDSNSVFLQCBRTATKGDKDAMPYAGNAKYRGWTWAGYAGSGN 578
 Database 422 YMKGFLQWQKESQKQVKD-NSLFLQCBRTAT-----DK-MPAGGNYKVGWDAV-SKG 473
 Query 579 TSKAYAQQFADNANFAEFDYDANKSLTGLI.PNTSSDGKSAFDITATDNGFSGKAN 638
 Database 474 TNWIAEDNRESGYRTEFDVNSDKKNGKLFDKGVN--PVFTYDATINGNFTGSAK 531

122 KINTNDVYKLEGDLKHNPFDNSIWQNIKNSKEVOTVYNEQEKONNIENQIKKENKENKEKDOTAL 181
 87 EICKNERVSEELSED-----KIKLQYQESVLIPIH-----LDE-----117
 182 KALIERTVDDYLTSLAKIYERKININDSKQNKWARTERDLYKTRSGYIYRSGSNI---DI 238
 118 -----LNKGKTS-----NDVYHSDSKRDLKQDNKRNQDLYKTRSGYVYDGFSNEIRNRNS 163
 239 ORKIAKTOFGDGAFLFYKGQTAKOLPVSEV-KYKGTDWDFMTDAKGQSFSSFERA-GDRY 296
 164 GHFVFKQDIDGTVYLGLGTPSKPLPKRVISYKGTFWDFVSNINLERIDGFTSGNKRNV 223
 297 SAMSHEPSLTDKKNKPDNYDEYG-----HSSEFTYDFSKSLTGFSLNQLQDH 348
 244 SATS-----TBTVNDRDHKGKLGPEVKGVAHSEFAVDFNKLTSLYRNGYIN 276
 349 HKCKVTKTKYDINARHIGNRFRGSAFALINKONESKAKHPTSDAUNRLEGFGYGNAAE 408
 277 RAKAQEVTKRYSBEADLAGNRFRGKAKA-----EKGDPIFTDS-NYLEGGFGPKAES 329
 409 LACKFLTDDNKLGFVGFKQKQSEAKETEAILDAYALGTENKSGTINPAFTANSKELDNF 468
 330 MACKFTINKSLPAVFAKSENGETTERIIDA-----TRIDLTDFNAKEINNF 378
 469 GNTNKLVLGSTVYDITLGNDF--VKTIDKEKPATTNQAGEPLTNDKVRVQV-CCSNLE 525
 379 GDAVLITDQGKDLA-GVNFKNSKTV-----INCKTMVAVACCSNLE 421
 526 HLRFGSL-----SIGNNSNVLQGERTATYKGDKDAMPVAGNARYRTWAGYVAGSGN 578
 422 YMFKGQLMIOKEGKQVKD--NSFLQGERTAT--DK-MPAGGNYKVGTMDALV--SKG 473
 579 TSKAYEAQOFADNANRAFFDVFDFANKSLTGKLIPINTSSDGKSAFDITATDNGPSCKAN 638
 474 TNVIAEADNNSRSGYTFDVFDSRDKVNGKLDPKGKVN--PVFTVDAATINGFGTGSK 531
 639 TPDIEGTGLKIDSKNSSESGRIVKVDATYIGGYGPQANELGGSFTYKNSNDAGNQDKDSA 698
 532 TSD--SGFALDAGSSQGNAYFSDIKVNGGYPTAGELGQFHKSID-----NGSV 581
 699 SVFGARKQQB 709
 582 GAVFGARKQIE 592

RESULTS 39
 Sequence 4, Application US/06321978
 Patent No. 5801018
 GENERAL INFORMATION:
 APPLICANT: POTTER, ANDREW A.
 APPLICANT: GERLACH, GERALD P.
 APPLICANT: WILLSON, PHILLIP J.
 APPLICANT: ROSSI-CAMPOS, AMALIA
 TITLE OF INVENTION: VACCINES FOR ACTINOBACILLUS
 NUMBER OF SEQUENCES: 9
 CORRESPONDENCE ADDRESS:
 STREET: 285 HAMILTON AVE, SUITE 200
 CITY: PALO ALTO
 STATE: CALIFORNIA
 COUNTRY: UNITED STATES OF AMERICA
 ZIP: 94301

COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 CURRENT APPLICATION DATA: Patent In Release #1.0, Version #1.25
 FILING DATE: 12-OCT-1994
 APPLICANT NUMBER: US/08/321,978
 422 YMFKGQLMIOKEGKQVKD--NSFLQGERTAT--DK-MPAGGNYKVGTMDALV--SKG 473
 579 TSKAYEAQOFADNANRAFFDVFDSRDKVNGKLDPKGKVN--PVFTVDATINGFGTGSK 698
 532 TSD--SGFALDAGSSQGNAYFSDIKVNGGYPTAGELGQFHKSID-----NGSV 581
 699 SVFGARKQQB 709
 582 GAVFGARKQIE 592

RESULTS 39
 Sequence 4, Application US/06321978
 Patent No. 5801018
 GENERAL INFORMATION:
 APPLICANT: POTTER, ANDREW A.
 APPLICANT: GERLACH, GERALD P.
 APPLICANT: WILLSON, PHILLIP J.
 APPLICANT: ROSSI-CAMPOS, AMALIA
 TITLE OF INVENTION: VACCINES FOR ACTINOBACILLUS
 NUMBER OF SEQUENCES: 9
 CORRESPONDENCE ADDRESS:
 STREET: 285 HAMILTON AVE, SUITE 200
 CITY: PALO ALTO
 STATE: CALIFORNIA
 COUNTRY: UNITED STATES OF AMERICA
 ZIP: 94301

COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 CURRENT APPLICATION DATA: Patent In Release #1.0, Version #1.25
 FILING DATE: 12-OCT-1994
 APPLICANT NUMBER: US/08/321,978
 422 YMFKGQLMIOKEGKQVKD--NSFLQGERTAT--DK-MPAGGNYKVGTMDALV--SKG 473
 579 TSKAYEAQOFADNANRAFFDVFDSRDKVNGKLDPKGKVN--PVFTVDATINGFGTGSK 698
 532 TSD--SGFALDAGSSQGNAYFSDIKVNGGYPTAGELGQFHKSID-----NGSV 581
 699 SVFGARKQQB 709
 582 GAVFGARKQIE 592

RESULT 40
 US-08-710-584-4
 Application US/08/10584
 Patent No. 5876725
 GENERAL INFORMATION:
 APPLICANT: POTTER, ANDREW A.
 APPLICANT: GERLACH, GERALD F.
 APPLICANT: WILLSON, PHILIP J.
 APPLICANT: ROSS, CAMPOS, AMALIA
 TITLE OF INVENTION: VACCINES FOR ACTINOBACILLUS
 TITLE OF INVENTION: PLEUROPNEUMONIAE
 NUMBER OF SEQUENCES: 9
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: ROBERTA L. ROBINS
 STREET: 94301 205 HAMILTON AVE., SUITE 200
 CITY: PALO ALTO
 STATE: CALIFORNIA
 COUNTRY: UNITED STATES OF AMERICA
 ZIP: 94301
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/710,584
 FILING DATE:
 CLASSIFICATION:
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US 08/321,978
 ATTORNEY/AGENT INFORMATION:
 NAME: ROBINS, ROBERTA L.
 REGISTRATION NUMBER: 33,208
 REFERENCE DOCKET NUMBER: 9001-0015.02
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 327-3400
 TELEFAX: (415) 327-3231
 INFORMATION FOR SEQ ID NO: 4:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 593 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: peptide
 US-08-710-584-4

Db 224 SATS-----ITETVNRDHVKGEELGDNEVKGVWHSSEPAVDFFNKLTGSLYRGIN 408
 Qy 349 HRGRTKTRDINARJHGRFRGATIAKDNESAKHPTSDADNRLGGFYGNABE 408
 Db 277 RNKAQEVTRKSYIEDIAGNRFRGAKA---EKAGDPFLTDS-NYLEGGFYCPKAEE 329
 Qy 409 LAGKPLTDNNKLFLFGAROSEAKETEATILDAYLTGTFNSGTNPAFTANSCKELDNF 468
 Db 330 MAGKPFPTNNKSLPAAKSNGETTERLIDA---TKIDLTOFNAEELNNF 378
 Qy 469 GNINKLVLGTSVTDLTOGNDF---VKTIDKEKPATTNQAGEPLTVDKVRVQ-CCSNLE 525
 Db 379 GDASVLIIDGQKIDIA-GVNFKNSTVE-----INGKTMVAVACCSNL 421
 Qy 526 HKFGSL-----SGDSNSVFLGQERTATKGDIDKAMPVAGNARYRGTWAGYAGSGN 578
 Db 422 YMKGFLWQBGKQVKD-NSLFQGERTAT---DK-MPAGGNKVKVGMDALV--SKG 473
 Qy 579 TSKAYBAAQOFADNANRAEFVDFAKSLTGLIPINTSDGKSAFDITATDGNFGSGKAN 638
 Db 474 TNWIAPADNNESGRTTEFDUNFSKRVNGLFDGGVN - PVFTVDTATINGNGFGSAK 531
 Qy 639 TPDITGGLKIDSKNISESGRVIVKDAIVIGGYGQANELGGSPFTYKSNDAGNQDKSSA 698
 Db 532 TSD---SGFALDAGSSQHGNAVESDVKVNGCFYGTAGELGGQFTHKSD---NGSV 581
 Qy 699 SVVFGARKQE 709
 Db 582 GAVFGAKRQE 592

Search completed: February 23, 2005, 20:23:14
 Job time: 33.061 secs

Query Match 24.6%; Score 913; DB 2; Length 593;
 Best Local Similarity 34.5%; Pred. No. 1.3e-7;
 Matches 252; Conservative 88; Mismatches 227; Indels 164; Gaps 28;

Qy 3 HIPLTTLCAVIAAVLTLTACGGGGSNPPAPTPINAGGAGNAGSGTGGAGSTD-NAANAG 61
 Db 2 HPKLNPPAIAFLSFLVAC-----SGGKSFDFLEDVRPN 35

Qy 62 STGGASSGTGASASTOKPQYDOPTDKKNKDEVSQIOPAMGYGVELKLRNWIPOOEBA 121
 Db 36 QTAKAERATTS-----YQDEBTKCTKEELDKLMAPALGYETQILRNRKAP- KTETG 86

Qy 122 KINTNDVYKLEPLKDNPKPDNSIWQNIKNSKEVQTVNQEKNIONIQKENKELDKTAL 181
 Db 87 EKRNERYVLESED-----KTKLYQEVSEVIPH-----LDE--- 117

Qy 182 KALIEKYLDDYLTSKAPKTYERKINDSHKONKARTDLKVRSGTYRSGSNI--DI 238
 Db 118 -----LNGKTT-----NDVIRSHDSKRLDNRDRLKVRSGYDGSFNEIRNDS 163

Qy 239 QKIIAKTGTGFDGALFYGTQATOKLPYSEV-KYKGTMDFMTDAKKGQFSSPERRA-GDRY 296

Db 164 GPHVFKQGIDGTVYVLLGVTPSKELPKGKVISYKGTMDFVSNINLREBIDGFDTSGPCKNV 223

Qy 297 SAMSSHBYPSLTLDDKKNPKDNYDEYG-----HSSEFTVDFSKSKSLTGFSLNLDH 348

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OM protein - protein search, using sw model

Run on: February 23, 2005, 20:07:47 ; Search time 25.8414 Seconds
(without alignments)

Title: US-09-673-133-2
Perfect score: 3690

Sequence: 1 MKHPLTTLCVAISAVLTA.....NTDDSKASVVFGTKRQBEVK 706

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched:

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents AA:
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5: /cgn2_6/picodata/1/iaa/PCUTS_COMB.pep:
6: /cgn2_6/picodata/1/iaa/backfiles1.dep:
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*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	3690	100.0	706	4	US-09-059-584-46
2	3204	86.8	702	3	US-08-513-009A-9
3	3204	86.8	702	4	US-08-778-570B-11 *
4	3204	86.8	702	4	US-09-584-11
5	3200	86.7	702	2	US-08-967-941-25
6	3200	86.7	702	3	US-09-074-650-25
7	3107	84.2	682	4	US-08-778-570B-10
8	3107	84.2	682	4	US-08-778-570B-12 *
9	3107	84.2	682	4	US-09-059-584-12
10	3009	81.5	713	4	US-09-059-584-49
11	2365.5	64.1	709	4	US-08-778-570B-15 *
12	2365.5	64.1	709	4	US-09-059-584-15
13	2268.5	61.5	689	4	US-08-778-570B-16 *
14	2268.5	61.5	689	4	US-09-059-584-16
15	2246.5	60.9	713	4	US-09-059-584-53
16	1891	51.2	707	2	US-08-949-941B-2
17	1884.5	51.1	712	4	US-09-059-584-51
18	2365.5	42.7	416	4	US-09-540-236-2388
19	863.5	23.4	662	3	US-09-045-728-3
20	852	23.1	601	3	US-08-513-009A-20
21	852	23.1	601	4	US-08-778-570B-26 *
22	852	23.1	601	4	US-09-059-584-26
23	844	22.9	599	3	US-08-448-194-2
24	844	22.9	599	3	US-08-921-61
25	840.5	22.8	578	3	US-08-448-194-61
26	840.5	22.8	578	1	US-08-867-921-61
27	833.5	22.6	598	1	US-08-478-435-97
28	833.5	22.6	598	2	US-08-337-83-97
29	833.5	22.6	598	2	US-08-478-373-97
30	833.5	22.6	598	3	US-08-474-671-97
31	833.5	22.6	598	3	US-08-483-577A-97
32	833.5	22.6	598	3	US-08-897-438-97
33	833.5	22.6	598	3	US-08-637-554-97
34	833.5	22.6	598	3	US-08-649-518-97
35	833.5	22.6	593	1	US-07-961-522-4
36	832.5	22.6	593	1	US-08-217-338-4
37	832.5	22.6	593	1	US-08-217-338-5
38	832.5	22.6	593	1	US-08-487-890A-100
39	832.5	22.6	593	1	US-08-978-4
40	832.5	22.6	593	2	US-08-710-584-4
41	832.5	22.6	593	2	US-08-337-483-100
42	832.5	22.6	593	2	US-08-478-335-100
43	832.5	22.6	593	2	US-08-478-73-100
44	832.5	22.6	593	2	US-08-478-671-100
45	832.5	22.6	593	3	US-08-478-671-100

ALIGNMENTS

RESULT 1
US-09-673-133-2
; Sequence 46 Application US/09059584
; Patient No. 6440701
; GENERAL INFORMATION:
; APPLICANT: Myers, Lisa E
; APPLICANT: Schryvers, Anthony B
; APPLICANT: Hardness, Robin E
; APPLICANT: Bossmore, Steena M.
; APPLICANT: Du, Rong Pan
; APPLICANT: Yang, Yan-Ping
; APPLICANT: Klein, Michael H
; TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sim & McBurney
; STREET: 6th Floor, 330 University Avenue
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: MSG 1R7
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.3.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/059/584
; FILING DATE: 14-APR-1998
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/778, 570
; FILING DATE: 03-JAN-1997
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Stewart, Michael I
; REGISTRATION NUMBER: 24973
; REFERENCE/DOCKET NUMBER: 1038-794
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1163
; INFORMATION FOR SEQ ID NO: 46:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 706 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; US-09-059-584-46
; Query Match Score 3690; DB 4; Length 706;
; Best Local Similarity 100.0%; Pred. No. 2e-243;

Matches 706; Conservative 0; Mismatches 0; Indels 0; Gaps 0; MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS MS-DOS
 SOFTWARE: Patent In Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/613, 009A
 FILING DATE: 08-MAR-1996
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24973
 REFERENCE/DOCKET NUMBER: 1038-542
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 9:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 702 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-613-009A-9

Query Match 86.8%; Score 3204; DB 3; Length 702;
 Best Local Similarity 87.2%; Pred. No. 2.8e-210;
 Matches 619; Conservative 39; Mismatches 40; Indels 12; Gaps 5;

Qy 1 MKHPLTTLCAISAVLLTACGGSGSNPPAFTPPIPNAAGSGNTCTGNAGGTDTNTAG 60
 Db 1 MKHPLTTLCAISAVLLTACGGSGSNPPAFTPPIPNAAGSGNTCTGNAGGTDTNTAG 60
 Qy 61 NTGGTNSGTGSANTPEPKVDPVTPDENKDEVSQIOPAMGYMALSKNLHKQODTPLD 120
 Db 61 NTGGTNSGTGSANTPEPKVDPVTPDENKDEVSQIOPAMGYMALSKNLHKQODTPLD 120
 Qy 61 SKAELAKQI1KEDVRSKSHFQQLSSLKKN1FHSNPGTTKATTTRDQYVYGYTLVNDGY 240
 Db 181 SKAELAKQI1KEDVRSKSHFQQLSSLKKN1FHSNPGTTKATTTRDQYVYGYTLVNDGY 240
 Qy 241 LTVKTDDELWNLGPVCGVYNGTTAKELPTQDAVYKKGHDFTMDVAKCRNRSEVKENL 300
 Db 241 LTVKTDDELWNLGPVCGVYNGTTAKELPTQDAVYKKGHDFTMDVAKCRNRSEVKENL 300
 Qy 301 QAGRYGASSSKDEYRNLLEDEKNIKPERYNGEYGSSEPTFNPDKKLTBFLSNLQDSRK 360
 Db 301 QAGRYGASSSKDEYRNLLEDEKNIKPERYNGEYGSSEPTFNPDKKLTBFLSNLQDSRK 360
 Qy 361 GNVTKTKYRIDANITYGNRFRGSATASDKAESKTKHPFTSDAKNSLEGGFYGPNAEELA 420
 Db 361 GNVTKTKYRIDANITYGNRFRGSATASDKAESKTKHPFTSDAKNSLEGGFYGPNAEELA 420
 Qy 421 GKFPLNDNKLFGVFGAKRRESKAGEKTEA1D DAYA LGTENKNNNATFTPTTKKQOLDNFGNA 480
 Db 421 GKFPLNDNKLFGVFGAKRRESKAGEKTEA1D DAYA LGTENKNNNATFTPTTKKQOLDNFGNA 480
 Qy 481 KKLVLGSTV1DLVPTGTYKDVNEFTKKNPDSATNKAEGTLMVNDKVSYVTKYGRNPFENL 540
 Db 481 KKLVLGSTV1DLVPTGTYKDVNEFTKKNPDSATNKAEGTLMVNDKVSYVTKYGRNPFENL 540
 Qy 541 KFGEISVGTSNSVFLQGERIATTEGKAVPKTGATKYLGNWVGY1FTGKDSSKSNEAQDVA 600
 Db 541 KFGEISVGTSNSVFLQGERIATTEGKAVPKTGATKYLGNWVGY1FTGKDSSKSNEAQDVA 600
 Qy 601 DFDIDFEKVKSVKGKLTTKDQDPVENITGD1AGNGWTGKASTTKADAGGYKIDSSTGKS 660
 Db 601 DFDIDFEKVKSVKGKLTTKDQDPVENITGD1AGNGWTGKASTTKADAGGYKIDSSTGKS 660
 Qy 661 IIVKDAEVTGGPYGPNAEONGGSFTHNTDSDKASVYFGTQROEVK 706
 Db 661 IIVKDAEVTGGPYGPNAEONGGSFTHNTDSDKASVYFGTQROEVK 706

RESULT 2
 US-08-613-009A-9
 Sequence 1, Application US/08613009A
 Patent No. 6090576
 GENERAL INFORMATION:
 APPLICANT: Myers, Lisa E
 APPLICANT: Schryvers, Anthony B
 APPLICANT: Harkness, Robin E
 APPLICANT: Lobsmore, Sheena M.
 APPLICANT: Du, Run-Pan
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Klein, Michel H
 TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella
 NUMBER OF SEQUENCES: 31
 CORRESPONDENCE ADDRESS:
 ADDRESS: Sim & McBurney
 STREET: 6th Floor, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: MSG 1R7
 COMPUTER READABLE FORM:

420 KFGEISVGTSNSVFLQGERIATTEGKAVPKTGATKYLGNWVGY1FTGKDSSKSNEAQDVA 420
 359 GNVTKTER1D1AN1HGNRFRGSATASNKN1TS -KHPPTSDA1NRLBEGFYGPKEELA 416
 421 GKFLTDNKLFGVFGAKRRESKAGEKTEA1D DAYA LGTENKNNNATFTPTTKKQOLDNFGNA 480
 417 GKFLTDNKLFGVFGAKRRESKAGEKTEA1D DAYA LGTENKNNNATFTPTTKKQOLDNFGNA 476
 481 KKLVLGSTV1DLVPTGTYKDVNEFTKKNPDSATNKAEGTLMVNDKVSYVTKYGRNPFENL 540
 477 KKLVLGSTV1DLVPTGTYKDVNEFTKKNPDSATNKAEGTLMVNDKVSYVTKYGRNPFENL 532
 541 KFGEISVGTSNSVFLQGERIATTEGKAVPKTGATKYLGNWVGY1FTGKDSSKSNEAQDVA 546
 533 KFGEISVGSHSVFLQGERIATTEGKAVPKTGATKYLGNWVGY1FTGKDSSKSNEAQDVA 592
 597 QDVAFDIDFEKVKSVKGKLTTKDQDPVENITGD1AGNGWTGKASTTKADAGGYKIDSS 655
 593 QDVAFDIDFEKVKSVKGKLTTKDQDPVFSITQG1AGNWTGPASTTKADAGGYKIDSS 652
 657 TGKSVIKDAEVTGGPYGPNAEONGGSFTHNTDSDKASVYFGTQROEVK 706

RESULT 3
 US-08-778-570B-11
 Sequence/11, Application US/08778570B
 Patent No. 6437096
 GENERAL INFORMATION:
 APPLICANT: Myers, Lisa E
 APPLICANT: Schryvers, Anthony B
 APPLICANT: Loosmore, Sheena M.
 APPLICANT: Du, Run-Pan
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Klein, Michel H
 TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella
 NUMBER OF SEQUENCES: 43
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Sim & McIntryne
 STREET: 6th Floor, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: M5G 1R7
 COMPUTER READABLE FORM:
 MEDIUM TYPE: FLOPPY disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/778,570B
 FILING DATE: 03-JAN-1997
 CLASSIFICATION: 536
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24973
 REFERENCE/DOCKET NUMBER: 1038-664
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-2455
 TELEFAX: (416) 551-1763
 INFORMATION FOR SEQ ID NO: 11:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 702 amino acids
 TYPE: amino acid
 STRANDEDNESS: Single
 TOPOLOGY: Linear
 US-08-778-570B-11

Query Match 86-8% score 3204; DB 4; Length 702;
 Best Local Similarity 87.2%; Preq. No. 2-8e-210;
 Matches 619; Conservative 36; Mismatches 40; Indels 12; Gaps 6

Qy 1 MKHPLTTLICVAISAVLLTAGCGGGSNNPAPTPNAGSGNTGNAGCTDNTANG 61
 Db 1 MKHPLTTLICVAISAVLLTAGCGGGSNNPAPTPNAGSGNTGNAGCTDNTANG 61
 Qy 61 NTGGTNSGTGSANTPEPKYKDVPPTDENKDEVSGLQEPAMGYGMALKNVLHQQDTPLD 121
 Db 61 NTGGTNSGTGSANTPEPKYKDVPPTKEKNDKVSQSLQEPAMGYGMALKNHLHRQDTPLD 121
 Qy 181 SKAFLAKQIKEDYRKSHFQQLVSSLKQNKIFHNSNDGTTKATRDLQYDGYLNDGNY 241
 Db 179 SDBEELAQKKEAVRKSHFQQVSLLENKIFHNSNDGTTKATRDLQYDGYLNDGNY 241
 Qy 241 LTTKTDELMNGLPYGGVVFNGTAKELPTQDAVYKKGHWDPMTDVAKORNRSEVKENL 301
 Db 239 LTTKTDKLWNLGLPYGGVVFNGTAKELPTQDAVYKKGHWDPMTDVANRNRSEVKENL 301
 Qy 301 QAGYYGASSEKDEYRNLLIDENKPKERTYNGEYHSSEFTVNFKQKLGLPGLFSLNQLDSRK 301

RESULT 4
US-09-059-584-11
Sequence 11, Application US/09059584
Patent No. 6440701
GENERAL INFORMATION:
APPLICANT: Myers, Lisa E
APPLICANT: Schryvers, Anthony B
APPLICANT: Hartness, Robin E
APPLICANT: Loosmore, Sheena M.
APPLICANT: Du, Run-Pan
APPLICANT: Yang, Yan-Ping
APPLICANT: Klein, Michel H
TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella
NUMBER OF SEQUENCES: 60
CORRESPONDENCE ADDRESS:
ADDRESSEE: SIm & McBurney
STREET: 6th Floor, 330 University Avenue
CITY: Toronto
STATE: Ontario
COUNTRY: Canada
ZIP: MSG 1R7
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/059, 584
FILING DATE: 14-APR-1998
CLASSIFICATION:
PRIORITY APPLICATION NUMBER: US 08/778, 570
FILING DATE: 03-JAN-1997
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Stewart, Michael I
REGISTRATION/DOCID: 24973
REFERENCE/DOCUMENT NUMBER: 10138-794
TELECOMMUNICATION INFORMATION:
TELEPHONE: (416) 595-1155
TELEFAX: (416) 595-1163
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 702 amino acids
TYPE: amino acid

STATE: Ontario
 COUNTRY: Canada
 ZIP: MSG 1R7
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC Compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 APPLICATION NUMBER: US/08/867, 941
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24, 973
 REFERENCE/DOCKET NUMBER: 1038-681 MIS:jb
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1633
 INFORMATION FOR SEQ ID NO: 25:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 702 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-867-941-25

Query Match Score 3204; DB 4; Length 702;
 Best Local Similarity 87.2%; Pred No. 2, 8e-210;
 Matches 619; Conservative 39; Mismatches 40; Indels 12; Gaps 5;

Qy 1 MKHPIPLTLCVTAISAVLTACCGGGSNPPAPTPINASGGNTGAGGTDTNTAG 60
 Db 1 MKHPIPLTLCVTAISAVLTACCGGGSNPPAPTPINASGGNTGAGGTDTNTAG 60

Qy 61 NTGGTNTSGTSANTPEPKYDOPVTDENKDKDVSQIOPPANGYGMALSKMNLHKQDTPLD 120
 Db 61 NTGGTNTSGTSANTPEPKYDOPVTENKDKVSS1OEPANGYGMALSKMNLHKQDTPLD 120

Qy 121 EKDIDTLDGKXOVAKEGKSPFLPSLQVENEKULDGTIAKMNNEADKNAIGDRIKKNDKSL 180
 Db 121 EKNIITDQGKXOVAEGRKSPFLPSLQVENEKULDGTIAKMNNEADKNAIGDRIKKNGRE-1 178

Qy 181 SKAELAKQIKEDVRSKHFQQLVSLLENKIKHFSNDCTTAKTDLQYDGYYLNDGY 240
 Db 179 SDEELAKQIKEDVRSKHFQQLVSLLENKIKHFSNDCTTAKTDLQYDGYYLNDGY 238

Qy 241 LTVKTDLWNLGPVGYYFNGTTAKELPTODAVKYGHDfmtDVAQRNRFSEYKELN 300
 Db 239 LTVKTDLWNLGPVGYYFNGTTAKELPTODAVKYGHDfmtDVAQRNRFSEYKENS 298

Qy 301 QAGRYGASSKSKDEYNRLLTDEKKNPERRYNGEYGHSSSEFTVNFKDQKLTLGELFSNLQDSRK 360
 Db 299 QAGWYGAASSKSKDEYNRLLTDEKKNPERRYNGEYGHSSSEFTVNFKDQKLTLGELFSNLQDRK 358

Qy 361 GNVTKTERYDIDANIYGNRFRGSGATASDKAENSKTKHPFTSDAKSLEGGYGPNAELLA 420
 Db 359 GNVTKTERYDIDANIYGNRFRGSGATASDKAENSKTKHPFTSDAKSLEGGYGPNAELLA 416

Qy 421 GKFLTNKDLKFLGVFGAKRESKAGEKTEAIIIDAYALGTFENKNNATTFPTFKQDQDNGNA 480
 Db 417 GKFLTNKDLKFLGVFGAKRESKAGEKTEAIIIDAYALGTFENKNNATTFPTFKQDQDNGNA 476

Qy 481 KKLVLGSTVPLDLYPTGYKDNEFTNKPDSATNKAGEETMNDYKSVKTYGYGRNEYL 540
 Db 477 KKLVLGSTVPLDLYPTDATK - NEFTKDPESATNEAGETLMVNDDEVSVKT - YGKNFNEYL 532

Qy 541 KFGELSYGTSNSVFLQCBERTATGEKAPPTKOTAKLYGNWGYITQKD --- SSXSFNEA 596
 Db 533 KFGELSYGTSNSVFLQCBERTATGEKAPPTKOTAKLYGNWGYITQKDGTGKSFPTDA 592

Qy 597 QDVADEFDIDFEEKSVKSKLTTKDRDPEVNITGDIAGNGTAKASTTKADAGGYKIDSS 656
 Db 593 QDVADEFDIDFENKSVSKLTTKDRDPEVNITGDIAGNGTAKASTTKADAGGYKIDSS 652

Qy 657 TCKSIVTKDAETTGGFVGPNAEMGGSFTHNTDDSKASAVVGTKROEVK 706
 Db 653 TCKSIVTKDAETTGGFVGPNAEMGGSFTHNADDSTASAVVGTKROEVK 702

RESULT 5 US-08-867-941-25
 Sequence 25, Application US/08867941
 Patent No. 597337
 GENERAL INFORMATION:
 APPLICANT: Loomore, Sheena M
 APPLICANT: Du, Run-Pan
 APPLICANT: Wang, Qijun
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Klain, Michel H
 TITLE OF INVENTION: LACTOFERRIN RECEPTOR GENES OF MORAXELLA
 NUMBER OF SEQUENCES: 67
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Sian & McBurney
 STREET: 6th Floor, 330 University Avenue
 CITY: Toronto, Ontario
 STATE: Ontario
 ZIP: MSG 1R7
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC Compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 APPLICATION NUMBER: US/08/867, 941
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24, 973
 REFERENCE/DOCKET NUMBER: 1038-681 MIS:jb
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1633
 INFORMATION FOR SEQ ID NO: 25:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 702 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-867-941-25

Query Match Score 3200; DB 2; Length 702;
 Best Local Similarity 87.0%; Pred No. 5.2e-210;
 Matches 618; Conservative 39; Mismatches 41; Indels 12; Gaps 5

Qy 1 MKHPIPLTLCVTAISAVLTACCGGGSNPPAPTPINASGGNTGAGGTDTNTAG 60
 Db 1 MKHPIPLTLCVTAISAVLTACCGGGSNPPAPTPINASGGNTGAGGTDTNTAG 60

Qy 61 NTGGTNTSGTSANTPEPKYDOPVTDENKDKDVSQIOPPANGYGMALSKMNLHKQDTPLD 120
 Db 61 NTGGTNTSGTSANTPEPKYDOPVTENKDKVSS1OEPANGYGMALSKMNLHKQDTPLD 120

Qy 121 EKDIDTLDGKXOVAKEGKSPFLPSLQVENEKULDGTIAKMNNEADKNAIGDRIKKNDKSL 180
 Db 121 EKNIITDQGKXOVAEGRKSPFLPSLQVENEKULDGTIAKMNNEADKNAIGDRIKKNGRE-1 178

Qy 181 SKAELAKQIKEDVRSKHFQQLVSLLENKIKHFSNDCTTAKTDLQYDGYYLNDGY 240
 Db 179 SDEELAKQIKEDVRSKHFQQLVSLLENKIKHFSNDCTTAKTDLQYDGYYLNDGY 238

Qy 241 LTVKTDLWNLGPVGYYFNGTTAKELPTODAVKYGHDfmtDVAQRNRFSEYKELN 300
 Db 239 LTVKTDLWNLGPVGYYFNGTTAKELPTODAVKYGHDfmtDVAQRNRFSEYKENS 298

Qy 301 QAGRYGASSKSKDEYNRLLTDEKKNPERRYNGEYGHSSSEFTVNFKDQKLTLGELFSNLQDSRK 360
 Db 300 QAGWYGAASSKSKDEYNRLLTDEKKNPERRYNGEYGHSSSEFTVNFKDQKLTLGELFSNLQDRK 358

Qy 361 GNVTKTERYDIDANIYGNRFRGSGATASDKAENSKTKHPFTSDAKSLEGGYGPNAELLA 420
 Db 359 GNVTKTERYDIDANIYGNRFRGSGATASDKAENSKTKHPFTSDAKSLEGGYGPNAELLA 416

Qy 421 LTVKTDLWNLGPVGYYFNGTTAKELPTODAVKYGHDfmtDVAQRNRFSEYKELN 300
 Db 417 LTVKTDLWNLGPVGYYFNGTTAKELPTODAVKYGHDfmtDVAQRNRFSEYKENS 298

Qy 481 KKLVLGSTVPLDLYPTGYKDNEFTNKPDSATNKAGEETMNDYKSVKTYGYGRNEYL 540
 Db 477 KKLVLGSTVPLDLYPTDATK - NEFTKDPESATNEAGETLMVNDDEVSVKT - YGKNFNEYL 532

Qy 541 KFGELSYGTSNSVFLQCBERTATGEKAPPTKOTAKLYGNWGYITQKD --- SSXSFNEA 596
 Db 533 KFGELSYGTSNSVFLQCBERTATGEKAPPTKOTAKLYGNWGYITQKDGTGKSFPTDA 592

Qy 597 QDVADEFDIDFEEKSVKSKLTTKDRDPEVNITGDIAGNGTAKASTTKADAGGYKIDSS 656
 Db 593 QDVADEFDIDFENKSVSKLTTKDRDPEVNITGDIAGNGTAKASTTKADAGGYKIDSS 652

Qy 657 TCKSIVTKDAETTGGFVGPNAEMGGSFTHNTDDSKASAVVGTKROEVK 706
 Db 653 TCKSIVTKDAETTGGFVGPNAEMGGSFTHNADDSTASAVVGTKROEVK 702

RESULT 5 US-08-867-941-25
 Sequence 25, Application US/08867941
 Patent No. 597337
 GENERAL INFORMATION:
 APPLICANT: Loomore, Sheena M
 APPLICANT: Du, Run-Pan
 APPLICANT: Wang, Qijun
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Klain, Michel H
 TITLE OF INVENTION: LACTOFERRIN RECEPTOR GENES OF MORAXELLA
 NUMBER OF SEQUENCES: 67
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Sian & McBurney
 STREET: 6th Floor, 330 University Avenue
 CITY: Toronto, Ontario
 STATE: Ontario
 ZIP: MSG 1R7
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC Compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 APPLICATION NUMBER: US/08/867, 941
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24, 973
 REFERENCE/DOCKET NUMBER: 1038-681 MIS:jb
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1633
 INFORMATION FOR SEQ ID NO: 25:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 702 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-867-941-25

Query Match Score 3200; DB 2; Length 702;
 Best Local Similarity 87.0%; Pred No. 5.2e-210;
 Matches 618; Conservative 39; Mismatches 41; Indels 12; Gaps 5

Qy 1 MKHPIPLTLCVTAISAVLTACCGGGSNPPAPTPINASGGNTGAGGTDTNTAG 60
 Db 1 MKHPIPLTLCVTAISAVLTACCGGGSNPPAPTPINASGGNTGAGGTDTNTAG 60

Qy 61 NTGGTNTSGTSANTPEPKYDOPVTDENKDKDVSQIOPPANGYGMALSKMNLHKQDTPLD 120
 Db 61 NTGGTNTSGTSANTPEPKYDOPVTENKDKVSS1OEPANGYGMALSKMNLHKQDTPLD 120

Qy 121 EKDIDTLDGKXOVAKEGKSPFLPSLQVENEKULDGTIAKMNNEADKNAIGDRIKKNDKSL 180
 Db 121 EKNIITDQGKXOVAEGRKSPFLPSLQVENEKULDGTIAKMNNEADKNAIGDRIKKNGRE-1 178

Qy 181 SKAELAKQIKEDVRSKHFQQLVSLLENKIKHFSNDCTTAKTDLQYDGYYLNDGY 240
 Db 179 SDEELAKQIKEDVRSKHFQQLVSLLENKIKHFSNDCTTAKTDLQYDGYYLNDGY 238

Qy 241 LTVKTDLWNLGPVGYYFNGTTAKELPTODAVKYGHDfmtDVAQRNRFSEYKELN 300
 Db 239 LTVKTDLWNLGPVGYYFNGTTAKELPTODAVKYGHDfmtDVAQRNRFSEYKENS 298

Qy 301 QAGRYGASSKSKDEYNRLLTDEKKNPERRYNGEYGHSSSEFTVNFKDQKLTLGELFSNLQDSRK 360
 Db 300 QAGWYGAASSKSKDEYNRLLTDEKKNPERRYNGEYGHSSSEFTVNFKDQKLTLGELFSNLQDRK 358

Qy 361 GNVTKTERYDIDANIYGNRFRGSGATASDKAENSKTKHPFTSDAKSLEGGYGPNAELLA 420
 Db 359 GNVTKTERYDIDANIYGNRFRGSGATASDKAENSKTKHPFTSDAKSLEGGYGPNAELLA 416

Qy 421 GKFPLTNKDLKFLGVFGAKRESKAGEETMNDYKSVKTYGYGRNEYL 480
 Db 417 GKFPLTNKDLKFLGVFGAKRESKAGEETMNDYKSVKTYGYGRNEYL 476

Qy 481 KKLVLGSTVPLDLYPTGYKDNEFTNKPDSATNKAGEETMNDYKSVKTYGYGRNEYL 540
 Db 477 KKLVLGSTVPLDLYPTDATK - NEFTKDPESATNEAGETLMVNDDEVSVKT - YGKNFNEYL 532

Qy 541 KFGELSYGTSNSVFLQCBERTATGEKAPPTKOTAKLYGNWGYITQKD --- SSXSFNEA 596
 Db 533 KFGELSYGTSNSVFLQCBERTATGEKAPPTKOTAKLYGNWGYITQKDGTGKSFPTDA 592

Qy 597 QDVADEFDIDFEEKSVKSKLTTKDRDPEVNITGDIAGNGTAKASTTKADAGGYKIDSS 656
 Db 593 QDVADEFDIDFENKSVSKLTTKDRDPEVNITGDIAGNGTAKASTTKADAGGYKIDSS 652

Db 593 QDVADFDIDFENKSVSGKLITKGRODPVFSITGQIAGNGWGTGASTSTTRADAGGYKIDSSS 652

Qy 657 TGKSTIVIKDAEVTTGGFYGGPNANEMCGSFTHNTDDSKASAVVPGTKRQEYK 706

Db 653 TGKSTAIKDAVNTGGFYGGPNANEMCGSFTHNADDSSKASAVVFGTKRQEYK 702

RESULT 6

US-09-074-658-25

Patent No. 6184371 Application US/09074658

GENERAL INFORMATION:

APPLICANT: Loosmore, Sheena M

APPLICANT: Run-Pan Du

APPLICANT: Onijun Wang

APPLICANT: Yang, Yan-Ping

APPLICANT: Klein, Michel H

TITLE OF INVENTION: LACTOFERRIN RECEPTOR GENES OF MORAXELLA

NUMBER OF SEQUENCES: 78

CORRESPONDENCE ADDRESS:

ADDRESSEE: Sim & McBurney

STREET: 6th Floor, 330 University Avenue

CITY: Toronto

STATE: Ontario

COUNTRY: Canada

ZIP: MSG 1R7

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent in Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/074, 658

FILING DATE: 08-MAY-1998

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: Stewart, Michael I

REGISTRATION NUMBER: 24, 973

REFERENCE/DOCKET NUMBER: 1038-795

TELECOMMUNICATION INFORMATION:

TELEPHONE: (416) 595-1155

TELEFAX: (416) 595-1163

INFORMATION FOR SEQ ID NO: 25:

SEQUENCE CHARACTERISTICS:

LENGTH: 702 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

US-09-074-658-25

Query Match 86.7%; Score 3200; DB 3; Length 702;

Best Local Similarity 87.0%; Pred. No. 5.2e-10;

Matches 618; Conservative 39; Mismatches 41; Indels 12; Gaps 5;

Qy 1 MKHIPITLTCVAISAVLTTACGGSGSNPPAPTPIPNASSGNTGNTGAGGTDTNTANG 60

Db 1 MKHIPITLTCVAISAVLTTACGGSGSNPPAPTPIPNASSGNTGNTGAGGTDTNTANG 60

Qy 121 EKDITLGDKKQVAKGEBKSPPLPESLDVENKLLDGYIAKNEADKNAIGRIKKDKDSL 180

Db 121 EKNIITLGDKKQVAKGEBKSPPLPESLDVENKLLDGYIAKNEADKNAIGRIKKENKE -1 178

Qy 181 SKAELAQKQEDVRSKHEPQVLSLKKFHSNDGTTKATRDLQYDGYLYNDGY 240

Db 179 SDEELAQKQEAVERSHEFQVQVLSLKKFHSNDGTTKATRDLKYDGYLYNDGY 238

Qy 241 LTVKTDKLWNLGPVGTVFNGTTAKELPTODAVKKGHDFTMDVAKORNRFSEVKENL 300

Db 239 LTVKTDKLWNLGPVGTVFNGTTAKELPTODAVKKGHDFTMDVANRNRFSEVKENL 298

Qy 301 QAGRYGGASSKDEYNRLLTDEKVKPERYCEGHSEFTVNFKDXKLTGELFSNQDSRK 360

Db 299 QAGWYGGASSKDEYNRLLTKEFSDAEGHSEFTVNFKDXKLTGELFSNQDRHK 358

Qy 361 GNVTKTKYKIDANLYGNFRGSATASDKAEASITKHPPTSDAKNSLEGGFYGPNAEELA 420

Db 359 GNVTKTERYDIDANHGNFRGSATASNKNDS -KHPPTSDAKNSLEGGFYGPKEELA 416

Qy 421 GKFLTNDNKLFGVFGAKRSKAGEETEALDAYLTGKNTAATPTPTFKQLDNFGNA 480

Db 417 GKFLTNDNKLFGVFGAKRSKABEETEALDAYLTGTTNTSNTAATPTPTFKQLDNFGNA 476

Qy 481 KKLVLGSTYDILVPTGVTKDNVNEFTKPKDSATKAGETLVMNDVSVK -YGNFEYL 532

Db 477 KKLVLGSTYDILVPTGVTKDNVNEFTKPKDPEASITAGTLMNDVSVK -SSSFNEA 596

Qy 541 KFGELSVGTTSNSVFLQGERTATTGKAVPTKGAKYLGNNWGYTIGKD ---SSSFNEA 597

Db 533 KFGELSIGGSHSVFQGERTATTGKAVPTKGAKYLGNNWGYTIGKDGTGKSFDTA 592

Qy 597 QDVADFDIDFEEKSKVKGKLTQDPVNTGJAGNGTGTAKSTTKADAGGYKIDSSS 656

Db 593 QDVADFDIDFGNKSWSGKLITKGQDPVTSITGQAGNGTGTASSTKADAGGYKIDSSS 652

Qy 657 TGKSTIVIKDAEVTCGGFYGPNAENCGSFTHNTDDSKASAVVFGTKRQEYK 706

Db 653 TGKSTAIKDAVNTGGFYGPNAENCGSFTHNADDSSKASAVVFGTRRQEYK 702

RESULT 7

US-08-613-009A-10

; Sequence 10, Application US/08613009A

; GENERAL INFORMATION:

; Patent No. 6190516

; APPLICANT: Myers, Lisa E

; APPLICANT: Schryvers, Anthony B

; APPLICANT: Harkness, Robin E

; APPLICANT: Loosmore, Sheena M.

; APPLICANT: Du, Run-Pan

; APPLICANT: Yang, Yan-Ping

; APPLICANT: Klein, Michel H

; TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella

; NUMBER OF SEQUENCES: 31

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Sim & McBurney

; STREET: 6th Floor, 330 University Avenue

; CITY: Toronto

; STATE: Ontario

; COUNTRY: Canada

; ZIP: M5G 1R7

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC/OS/MS-DOS

; SOFTWARE: Patent in Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/613, 009A

; FILING DATE: 08-MAR-1996

; CLASSIFICATION: 435

; ATTORNEY/AGENT INFORMATION:

; NAME: Stewart, Michael I

; REGISTRATION NUMBER: 24, 973

; REFERENCE/DOCKET NUMBER: 1038-795

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (416) 595-1155

; TELEFAX: (416) 595-1163

; IN INFORMATION FOR SEQ ID NO: 25:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 702 amino acids

; TYPE: amino acid

; STRANDEDNESS: single

; TOPOLOGY: linear

Query Match 86.7%; Score 3200; DB 3; Length 702;

Best Local Similarity 87.0%; Pred. No. 5.2e-10;

Matches 618; Conservative 39; Mismatches 41; Indels 12; Gaps 5;

Qy 61 NTGGTNSGTSANTPEPKYKDPTDENKDEVSGTQOBPANGYGMALSKNMLHKOQDTPLD 120

Db 61 NTGGTNSGTSANTPEPKYQDVTPEKNEDKVSSQEPANGYGMALSKNMLHNFQDTPLD 120

Qy 121 EKDITLGDKKQVAKGEBKSPPLPESLDVENKLLDGYIAKNEADKNAIGRIKKDKDSL 180

Db 121 EKNIITLGDKKQVAKGEBKSPPLPESLDVENKLLDGYIAKNEADKNAIGRIKKENKE -1 178

Qy 181 SKAELAQKQEDVRSKHEPQVLSLKKFHSNDGTTKATRDLQYDGYLYNDGY 240

Db 179 SDEELAQKQEAVERSHEFQVQVLSLKKFHSNDGTTKATRDLKYDGYLYNDGY 238

Qy 241 LTVKTDKLWNLGPVGTVFNGTTAKELPTODAVKKGHDFTMDVAKORNRFSEVKENL 300

Db 239 LTVKTDKLWNLGPVGTVFNGTTAKELPTODAVKKGHDFTMDVANRNRFSEVKENL 298

US-08-613-009A-10

Query Match 84.2%; Score 3107; DB 3; Length 682;
 Best Local Similarity 86.8%; Pred. No. 1.1e-203;
 Matches 599; Conservative 39; Mismatches 40; Indels 12; Gaps 5;

Qy 21 CGGGGSNNPAPTPIPNAAGSGNTNTGAGGTNTANAGNTGGTNSGCSANTPEPKK 80
 Db 1 CGGGGSNNPAPTPIPNAAGSGNTNTGAGGTNTANAGNTGGTNSGCSANTPEPKQ 60

Qy 81 DVPTDENKDEVSGIOPBANGYMAISLQKQVAKGKEKP 140
 Db 61 DVPTEKNEKDVKVSSIOPEBANGYMAISLQKQVAKGKEKP 120

Qy 141 1PFSLDVNEKLLDGYTAKNEADKNAIGRIKCONKDKSLSKAEALAKQ1KEDVRSKHEFQ 200
 Db 121 1PFSLDVNEKLLDGYTAKNEADKNAIGRIKCONKE-1SDEELAKQ1KEAVRSKHEFQ 178

Qy 201 QVLSSENK1K1FHSNNGTTRKATTTRDLOQYVYGYYLVDNGNLYLTVKTDKDELNLGPQGGVFN 260
 Db 179 QVLSSENK1K1FHSNNGTTRKATTTRDLOQYVYGYYLVDNGNLYLTVKTDKDELNLGPQGGVFN 238

Qy 261 GTTAKELPLTDQAVKYGHDPEMDVAKQNRFSEVKENIQAGRYYGAASKDEYNRLTD 320
 Db 239 GTTAKELPLTDQAVKYGHDPEMDVANRNRFSEVKENIQAGRYYGAASKDEYNRLTK 298

Qy 322 EKNPKEVNGBYGHISSESEFTYNFKDKCLTGFSLNQDSRKGNTVTKYDIDANIYGNRF 380
 Db 299 EDSADDGHSSEYGHSEFTYNFKCKEKLGLFSNQDRKGNTVTERDIDANIYGNRF 358

Qy 381 RGSATASDKA8AKSTKHPFTSDAKNSLLEGFFYGPNAEELAGKEFTNDNLFGVPGAKRES 440
 Db 359 RGSATASDKA8AKSTKHPFTSDAKNSLLEGFFYGPNAEELAGKEFTNDNLFGVPGAKRES 416

Qy 441 KAGEKTEA1LDAYA1GTFNGKNAATTFTPKTQDQVADFTIDVPTGVTKD 500
 Db 417 KAGEKTEA1LDAYA1GTFNGKNAATTFTPKTQDQVADFTIDVPTGVTKD 475

Qy 501 VNEFTQNKPDSDATNKAGETLMNDKVSVTKYGYGRNFYELTKFGELSVGTSNSVPLQERT 560
 Db 476 -NEFTQDKPDSATNEGETLMNDVSVKT- -YGNFETLKFGEISIGGSHSVPLQERT 532

Qy 561 ATTGEKAVPFTKGTAXYLGNRGGYITGKD---SSSKSFNRAQDVADFTIDFEKSYVKGKL 616
 Db 533 ATTGEKAVPFTKGTAXYLGNRGGYITGKD---TGTGKSFQDVAQDFDQGKNSVSKLJ 592

Qy 617 TKDRODPVFNITGDIAGNGWTGKCASTKADAGGYKIDSSTGKSVIKDAEVTCGYGEN 676
 Db 593 TKGRQDPVFSITGQLAGNGWTGTASTTAKADAGGYKIDSSTGKSVIKDAVNTGGFYGEN 652

Qy 677 ANEMGGSFHTNADDSKASVVFGTQKQEVK 706
 Db 653 ANEMGGSFHTNADDSKASVVFGTQKQEVK 682

RESULT 8
 US-08-778-570B-12
 Sequence 12, Application US/08778570B
 Patent No. 6437036

GENERAL INFORMATION:
 APPLICANT: Myers, Lisa E.
 APPLICANT: Schryvers, Anthony B.
 APPLICANT: Harkness, Robin E.
 APPLICANT: Loosmore, Sheena M.
 APPLICANT: Du, Run-Pan
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Klein, Michel H.

TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella
 NUMBER OF SEQUENCES: 43

CORRESPONDENCE ADDRESS:
 ADDRESSEE: Sim & McBurney
 STREET: 6th Floor, 330 University Avenue
 CITY: Toronto

STATE: Ontario
 COUNTRY: Canada
 ZIP: M5G 1R7
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC DOS/MS-DOS
 SOFTWARE: Patent Release #1.0, Version #1.3.0
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/778,570B
 FILING DATE: 03-JAN-1997
 CLASSIFICATION: 536
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I.
 REGISTRATION NUMBER: 24973
 REFERENCE/DOCKET NUMBER: 1038-6-64
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 12:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 682 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-778-570B-12

Query Match 84.2%; Score 3107; DB 4; Length 682;
 Best Local Similarity 86.8%; Pred. No. 1.1e-203;
 Matches 599; Conservative 39; Mismatches 40; Indels 12; Gaps 5;

Qy 21 CGGGGSNNPAPTPIPNAAGSGNTNTGAGGTNTANAGNTGGTNSGCSANTPEPKK 80
 Db 1 CGGGGSNNPAPTPIPNAAGSGNTNTGAGGTNTANAGNTGGTNSGCSANTPEPKQ 60

Qy 81 DVPTDENKDEVSGIOPBANGYMAISLQKQVAKGKEKP 140
 Db 61 DVPTEKNEKDVKVSSIOPEBANGYMAISLQKQVAKGKEKP 120

Qy 141 1PFSLDVNEKLLDGYTAKNEADKNAIGRIKCONKDKSLSKAEALAKQ1KEDVRSKHEFQ 200
 Db 121 1PFSLDVNEKLLDGYTAKNEADKNAIGRIKCONKE-1SDEELAKQ1KEAVRSKHEFQ 178

Qy 201 QVLSSENK1K1FHSNNGTTRKATTTRDLOQYVYGYYLVDNGNLYLTVKTDKDELNLGPQGGVFN 260
 Db 179 QVLSSENK1K1FHSNNGTTRKATTTRDLOQYVYGYYLVDNGNLYLTVKTDKDELNLGPQGGVFN 238

Qy 261 DVPTDENKDEVSGIOPBANGYMAISLQKQVAKGKEKP 140
 Db 239 DVPTEKNEKDVKVSSIOPEBANGYMAISLQKQVAKGKEKP 120

Qy 322 EKNPKEVNGBYGHISSESEFTYNFKDKCLTGFSLNQDSRKGNTVTKYDIDANIYGNRF 380
 Db 299 EDSADDGHSSEYGHSEFTYNFKCKEKLGLFSNQDRKGNTVTERDIDANIYGNRF 358

Qy 381 RGSATASDKA8AKSTKHPFTSDAKNSLLEGFFYGPNAEELAGKEFTNDNLFGVPGAKRES 440
 Db 359 RGSATASDKA8AKSTKHPFTSDAKNSLLEGFFYGPNAEELAGKEFTNDNLFGVPGAKRES 416

Qy 441 KAGEKTEA1LDAYA1GTFNGKNAATTFTPKTQDQVADFTIDVPTGVTKD 500
 Db 417 KAGEKTEA1LDAYA1GTFNGKNAATTFTPKTQDQVADFTIDVPTGVTKD 475

Qy 501 QVLSSENK1K1FHSNNGTTRKATTTRDLOQYVYGYYLVDNGNLYLTVKTDKDELNLGPQGGVFN 260
 Db 479 QVLSSENK1K1FHSNNGTTRKATTTRDLOQYVYGYYLVDNGNLYLTVKTDKDELNLGPQGGVFN 238

Qy 561 GTTAKELPLTDQAVKYGHDPEMDVAKQNRFSEVKENIQAGRYYGAASKDEYNRLTD 320
 Db 533 GTTAKELPLTDQAVKYGHDPEMDVANRNRFSEVKENIQAGRYYGAASKDEYNRLTK 298

Qy 617 EKNPKEVNGBYGHISSESEFTYNFKDKCLTGFSLNQDSRKGNTVTKYDIDANIYGNRF 380
 Db 299 EDSADDGHSSEYGHSEFTYNFKCKEKLGLFSNQDRKGNTVTERDIDANIYGNRF 358

Qy 381 RGSATASDKA8AKSTKHPFTSDAKNSLLEGFFYGPNAEELAGKEFTNDNLFGVPGAKRES 440
 Db 359 RGSATASDKA8AKSTKHPFTSDAKNSLLEGFFYGPNAEELAGKEFTNDNLFGVPGAKRES 416

Qy 441 KAGEKTEA1LDAYA1GTFNGKNAATTFTPKTQDQVADFTIDVPTGVTKD 500
 Db 417 KAGEKTEA1LDAYA1GTFNGKNAATTFTPKTQDQVADFTIDVPTGVTKD 475

Qy 501 VNEFTQNKPDSDATNKAGETLMNDKVSVTKYGYGRNFYELTKFGELSVGTSNSVPLQERT 560
 Db 476 -NEFTQDKPDSATNEGETLMNDVSVKT- -YGNFETLKFGEISIGGSHSVPLQERT 532

Qy 561 ATTGEKAVPFTKGTAXYLGNRGGYITGKD---SSSKSFNRAQDVADFTIDFEKSYVKGKL 616
 Db 533 ATTGEKAVPFTKGTAXYLGNRGGYITGKD---TGTGKSFQDVAQDFDQGKNSVSKLJ 592

Qy 617 TKDRODPVFNITGDIAGNGWTGKCASTKADAGGYKIDSSTGKSVIKDAEVTCGYGEN 676
 Db 593 TKGRQDPVFSITGQLAGNGWTGTASTTAKADAGGYKIDSSTGKSVIKDAVNTGGFYGEN 652

Qy 677 ANEMGGSFHTNADDSKASVVFGTQKQEVK 706
 Db 653 ANEMGGSFHTNADDSKASVVFGTQKQEVK 682

RESULT 8
 US-08-778-570B-12
 Sequence 12, Application US/08778570B
 Patent No. 6437036

GENERAL INFORMATION:
 APPLICANT: Myers, Lisa E.
 APPLICANT: Schryvers, Anthony B.
 APPLICANT: Harkness, Robin E.
 APPLICANT: Loosmore, Sheena M.
 APPLICANT: Du, Run-Pan
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Klein, Michel H.

TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella
 NUMBER OF SEQUENCES: 43

CORRESPONDENCE ADDRESS:
 ADDRESSEE: Sim & McBurney
 STREET: 6th Floor, 330 University Avenue
 CITY: Toronto

STATE: Ontario
 COUNTRY: Canada
 ZIP: M5G 1R7
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC DOS/MS-DOS
 SOFTWARE: Patent Release #1.0, Version #1.3.0
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/778,570B
 FILING DATE: 03-JAN-1997
 CLASSIFICATION: 536
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I.
 REGISTRATION NUMBER: 24973
 REFERENCE/DOCKET NUMBER: 1038-6-64
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 12:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 682 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-778-570B-12

REFERENCE/DOCKET NUMBER: 1038-794
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 49:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 713 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 US-09-059-584-49

Query Match 81.5%; Score 3009; DB 4; Length 713;
 Best Local Similarity 82.7%; Pred. No. 5.6e-197; Mismatches 47; Indels 16; Gaps 8;
 Matches 591; Conservative 47; Computer Readable Form:

Qy	1 MKHPIPLTLCVAISAVLTLACGGSGSNPPAFTP1PNASGSNTGAGGTNTANG 60	Computer Type: Floppy disk
Db	1 MKHPIPLTLCVAISAVLTLACGGSGSNPPAFTP1PNASGSNTGAGGTNTANG 60	Computer: IBM PC compatible
Qy	61 NTGGTNSGTSANTPPEKVKDVTDPDKDEVSIQEPANGYMAKSNLHKQDQTPD 120	Operating System: PC DOS/MS-DOS
Db	61 NTGGTSSGTGSASTSEPKVQDVPPTPNNKEQVSSQEPAANGYMAKSNLHKQDQTPD 120	Software: Patent Release #1.0, Version #1.1.0
Qy	121 EKDITLDGKQVAKGEKSPLPFSLDVNEVKLDGYTAKNEADKAIGRIKDND-KDKS 179	Current Application Data:
Db	121 AKNITLDGKQVADNQSPLPFSLDVNEVKLDGYTAKNEADKAIGRIKRENEQNKK 180	Application Number: US/08/778,570B
Qy	180 LSKAELAKQKQKEDVRSKHFQVQVLSLKKKLFHNSDGTKATTEDLQYDGYTLNDEN 239	Classification: 03-JAN-1997
Db	181 ISDBELAKKIKENVRKSPFQQVLSIISKAKTFHSNDKTKTAKTRBLKDYDGYTLNDAN 240	Attorney/Agent Information: 536
Qy	240 YLTVKTD - ELWLNQPGVGFYNGTTAKELPTDAVKKGHWDMTDAVKQRNRFSEVK 297	Name: Stewart, Michael I
Db	241 YLTVKTDKPLKLNWNQSPVGGFVYNGTTAKELPTDAVKKGHWFMTDAKRNRFSEVK 300	Registration Number: 24973
Qy	298 ENLQAGRYGASSKDKBYNRLLTDERNKPERYNGEYGHSSSEFTVNFKDNLQD 357	Reference/DOCKET NUMBER: 1038-664
Db	301 ETYQAGWWYGAASSKDKBYNRLLTAKADAPDNYSGEYGHSSSEFTVNFKDNLQD 360	Telephone: (416) 595-1155
Qy	358 SRKGNYTKTCKRDIIDANIYGNRFRGSSATASDKAASKTKHPTFSDAKNSLIEGGYGPNAE 417	Telefax: (416) 595-1163
Db	361 SHQKVTKTKTCKRDIIDANIYGNRFRGSSATASDKAASKTKHPTFSHAKDLEGGYGPKBE 420	Information for SEQ ID NO: 15:
Qy	418 ELAGKPLTNDNKLFGVFGAKRESKAGEKTAIDDAYALGTFPNKNAT - TTFPTPKQLD 475	SEQUENCE CHARACTERISTICS:
Db	421 ELAGKPLTNDNKLFGVFGAKRESKAGEKTAIDDAYALGTFPNKPCTTNAFTANSKKEID 479	REFERENCE/DOCKET NUMBER: 1038-664
Qy	476 NFGNAKRLVIGSTVIDLVPITGVTDVNEFTKPKDPSATKRAGETLMVNDKSVRKYGYGR 535	TELEPHONE: (416) 595-1155
Db	480 NFGNAKRLVIGSTVIDLVPITDAVNEF - KEKPKSATKAGETLMVNDDEVSKT - 1GK 536	TELEFAX: (416) 595-1163
Qy	536 NFEYLRKGELSGVGTNSVFLQGERPATGKAVPTKGTKYLGHWVGYTGKDS - 590	INFORMATION FOR SEQ ID NO: 15:
Db	537 NFEYLRKGELSGVGGSHSVFLQGERPATGKAVPTKGTKYLGHWVGYTGADSKGSTD 596	REGISTRATION NUMBER: 1038-664
Qy	591 -KSFNEAQDVAQDPEDFEKKSVKGKLTTKRQDPFVNITCDIAGNGWTGKASTIKADAG 649	TELEPHONE: (416) 595-1155
Db	597 GKGFTDAKQDADFDIFEKKSVNGKLTTKRDQDPFVNITCEIAGNGWTGKASTAEANAGC 656	TELEFAX: (416) 595-1163
Qy	650 YKIDSSSTGKSVIVKDAETGGFYGPNAFMNGGSPTHNT-DDSKASAVVFGTKRS 703	INFORMATION FOR SEQ ID NO: 15:
Db	657 YKIDSSSTGKSVIVKDAVTTGGFYGPNAFEMGGSPTHNSGNDGKVSUVFGTKKQE 711	REGISTRATION NUMBER: 1038-664

RESULT 11
 US-08-778-570B-15
 Sequence 15, Application US/08/778570B
 Patent No. 6437096
 GENERAL INFORMATION:
 APPLICANT: Myers, Lisa E
 APPLICANT: Schryvers, Anthony B
 APPLICANT: Harkness, Robin E
 APPLICANT: Loosmore, Sheena M.

334 HSSEPTUNFKDCKLTLGELFSNLQDSRKEMNTKTKYDIDANIYGNRFRGSSATASDKAEAS 393
 335 HSSBETVDFSKKSLKGELSSNIQCHKGSYNKTCKRDIIDANIYGNRFRGSSATASDTEAS 394
 394 KTRHFTSDAKNSLGGFYGPNABELLAGKFLTNNDKLGFGVFGAKRESKAGEKTBAILDAY 453
 395 KSRHFTSDAKNSLGGFYGPNABELLAGKFLTNNDKLGFGVFGAKRESKAGEKTBAILDAY 454
 454 ALGTPNKNAT - TTPFTPKKQDQDNFGNACKLVQGSTVDLVPTGVTKDNEFTKPKDPS 511

ZIP: MSG 1R7
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 OPERATING SYSTEM: IBM PC compatible
 SOFTWARE: PC-DOS/MS-DOS
 CURRENT APPLICATION NUMBER:
 APPLICATION NUMBER: US/08/778,570B
 FILING DATE: 03-JAN-1997
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24973
 REFERENCE/DOCKET NUMBER: 1038-664
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 16:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 689 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-778-570B-16

Query Match 61.5%; Score 2268.5; DB 4; Length 689;
 Best Local Similarity 66.1%; Pred. No. 1.7e-146;
 Matches 475; Conservative 51; Nismatches 130; Indels 63; Gaps 15;

Qy 21 CGG-SCGSNPPAPTIPNAGSGNTGNTGAGGT---DNTANAGNTGGTNTGTSANTP 75
 Db 1 CGGSSGGFPNPASTIPNAGNSGNAGTGGANSGAGSASP 60

Qy 76 EPKYKDVPDTENKQDEVSGLQEPANGYGHMSKLNQ---LHKQDQTPLDKEIDITLGDKQ 132
 Db 61 EPKYKDVPDTENKQAEVGSLQEPANGYGHMSKLNQ---LHKQDQTPLDKEIDITLGDKQ 116

Qy 133 VAKGERKSPLPFLSDV-ENKLLDGYIAKMNADKAIGDRIKDKNQ--DKSLSK----- 182
 Db 117 ---GDLKHNPFDNSIWQNIKNSKEQTVNQEKQNIEQ1KRENQRPKQD1KRENQRPKQD1VALQY 173

Qy 183 -----AELAKQIKEDVRSKSHFQQVLSLANKKIFSNNDGTTKATRDLQVYDGY 233
 Db 174 IEKVLDDDRTELAKPYE-----KN-INVSHDKQNKARRDRDLKVRSGY- 216

Qy 234 LVNDGNYLTVTDEIWNLQGPVGVYNGTTAKELPTQDAVKYGHMDPMTDVAQRNF 293
 Db 217 -IYRGCSNIPKPKTAKTGPFDGALYQGQTQAKLPVSS-VKYGKTDWMTDAKGQS 274

Qy 294 SEVKENLQAGRYGASSKDEYNRLLTDEKPKPRTYGHSSSEFTVNFKDQKLUTGELFS 353
 Db 275 SFGTSORLADGRYSAMSYHYPSPSLTVDISKSKJGELS 334

Qy 354 NLQDSRKGNVTKTKRYDIDANIYGNRFRGSGATASDKAELASKTKPFTSDAKNSLEGGFG 413
 Db 335 NIQDGHKGSYMKTKRYDIDANIYGNRFRGSGATASDTEASKSKHFTSDAKNSLEGGFG 394

Qy 414 PNAEELLAGKFNTDNKLFGVGAKESSAKERTEAIIIDAYALGTFNPKGTNPARTANSK 454
 Db 395 PNAEELLAGKFNTDNKLFGVGAKESSAKERTEAIIIDAYALGTFNPKGTNPARTANSK 454

Qy 472 KOLDNFGNAKCLVLGSTVIDLVPTGTYKDNNEFTKPKPSATNKGGETLMNDKVSXTY 531
 Db 455 KELDNFGNAKCLVLGSTVIDLVPTGTYKDNNEFTKPKPSATNKGGETLMNDKVSXTY 513

Qy 532 GYGRNFEYLKFGEGLSYGTSNSVFLGCGTATTGKAVPKPFTGTYKLNWNGYITGKD--- 588
 Db 514 GYGRNFEYLKFGEGLSYGTSNSVFLGCGTATTGKAVPKPFTGTYKLNWNGYITGKDGT 570

Qy 589 -SSKSPNEAQDPAFDIDFECKSVRGKLTMDRQDPVFNITGKASTTKADA 647
 Db 571 STGKSFNEAQDIAFDIDFECKSVRGKLTMDRQDPVFNITGKASTTKADA 630

Qy 648 GGKIDSSSTGKSVIVKDAEVTTGGYGPNAENGGSFTHNTDDSKASVFGTKRQEEVK 706
 Db 631 GGKIDSSSTGKSVIVKDAEVTTGGYGPNAENGGSFTHNTDDSKASVFGTKRQEEVK 689

RESULT 14
 US-09-059-584-16
 ; Sequence 16, Application US/09059584
 ; Patent No. 6440701
 ; GENERAL INFORMATION:
 ; APPLICANT: Myers, Lisa E
 ; APPLICANT: Schryvers, Anthony B
 ; APPLICANT: Harkness, Robin E
 ; APPLICANT: Losnoore, Sheena M.
 ; APPLICANT: Du, Run-Pan
 ; APPLICANT: Yang, Yan-Ping
 ; APPLICANT: Klein, Michel H
 ; TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella
 ; NUMBER OF SEQUENCES: 60
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Sim & McBurney
 ; STREET: 6th Floor, 330 University Avenue
 ; CITY: Toronto
 ; STATE: Ontario
 ; COUNTRY: Canada
 ; ZIP: M5G 1R7
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent In Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/059,584
 ; FILING DATE: 14-APR-1998
 ; CLASSIFICATION:
 ; PRIORITY APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/778,570
 ; FILING DATE: 03-JAN-1997
 ; CLASSIFICATION:
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Stewart, Michael I
 ; REGISTRATION NUMBER: 24973
 ; REFERENCE/DOCKET NUMBER: 1038-794
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (416) 595-1155
 ; TELEFAX: (416) 595-1163
 ; INFORMATION FOR SEQ ID NO: 16:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 689 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; US-09-059-584-16

Query Match 61.5%; Score 2268.5; DB 4; Length 689;
 Best Local Similarity 66.1%; Pred. No. 1.7e-146;
 Matches 475; Conservative 51; Nismatches 130; Indels 63; Gaps 15;

Qy 21 CGG-SCGSNPPAPTIPNAGSGNTGNTGAGGT---DNTANAGNTGGTNTGTSANTP 75
 Db 1 CGGSSGGFPNPASTIPNAGNSGNAGTGGANSGAGSASP 60

Qy 76 EPKYKDVPDTENKQDEVSGLQEPANGYGHMSKLNQ---LHKQDQTPLDKEIDITLGDKQ 132
 Db 61 EPKYKDVPDTENKQAEVGSLQEPANGYGHMSKLNQ---LHKQDQTPLDKEIDITLGDKQ 116

Qy 133 VAKGERKSPLPFLSDV-ENKLLDGYIAKMNADKAIGDRIKDKNQ--DKSLSK----- 182
 Db 117 ---GDLKHNPFDNSIWQNIKNSKEQTVNQEKQNIEQ1KRENQRPKQD1KRENQRPKQD1VALQY 173

Qy 183 -----AELAKQIKEDVRSKSHFQQVLSLANKKIFSNNDGTTKATRDLQVYDGY 233
 Db 174 IEKVLDDDRTELAKPYE-----KN-INVSHDKQNKARRDRDLKVRSGY- 216

Qy 234 LVNDGNYLTVTDEIWNLQGPVGVYNGTTAKELPTQDAVKYGHMDPMTDVAQRNF 293
 Db 217 -IYRGCSNIPKPKTAKTGPFDGALYQGQTQAKLPVSS-VKYGKTDWMTDAKGQS 274

Qy 294 SEVKENLQAGRYGASSKDEYNRLLTDEKPKPRTYGHSSSEFTVNFKDQKLUTGELFS 353
 Db 275 SFGTSORLADGRYSAMSYHYPSPSLTVDISKSKJGELS 334

Qy 354 NLQDSRKGNVTKTKRYDIDANIYGNRFRGSGATASDKAELASKTKPFTSDAKNSLEGGFG 413
 Db 335 NIQDGHKGSYMKTKRYDIDANIYGNRFRGSGATASDTEASKSKHFTSDAKNSLEGGFG 394

Qy 414 PNAEELLAGKFNTDNKLFGVGAKESSAKERTEAIIIDAYALGTFNPKGTNPARTANSK 454
 Db 395 PNAEELLAGKFNTDNKLFGVGAKESSAKERTEAIIIDAYALGTFNPKGTNPARTANSK 454

Qy 472 KOLDNFGNAKCLVLGSTVIDLVPTGTYKDNNEFTKPKPSATNKGGETLMNDKVSXTY 531
 Db 455 KELDNFGNAKCLVLGSTVIDLVPTGTYKDNNEFTKPKPSATNKGGETLMNDKVSXTY 513

Qy 532 GYGRNFEYLKFGEGLSYGTSNSVFLGCGTATTGKAVPKPFTGTYKLNWNGYITGKD--- 588
 Db 514 GYGRNFEYLKFGEGLSYGTSNSVFLGCGTATTGKAVPKPFTGTYKLNWNGYITGKDGT 570

Qy 589 -SSKSPNEAQDPAFDIDFECKSVRGKLTMDRQDPVFNITGKASTTKADA 647
 Db 571 STGKSFNEAQDIAFDIDFECKSVRGKLTMDRQDPVFNITGKASTTKADA 630

Qy 648 GGKIDSSSTGKSVIVKDAEVTTGGYGPNAENGGSFTHNTDDSKASVFGTKRQEEVK 706
 Db 631 GGKIDSSSTGKSVIVKDAEVTTGGYGPNAENGGSFTHNTDDSKASVFGTKRQEEVK 689

RESULT 16
US-08-949-941B-2
; Sequence 2, Application US/08949941B
; Patent No. 597657
; GENERAL INFORMATION:
; APPLICANT: Murphy, Timothy F.

RESULT 16
US-08-949-
Sequence
Patient No
GENERAL
APPLIC

Qy	471	KKOLDNFGNACKLVLGIGSTYDLYPVGTVKDVNNEFTKPKPDSATNKGATELMVNDKVSVKT	530
Qy	461	RKEELNFGNINKLVLGISTVDL-TQGNDPKTIDKEKPATTSNDAQEPLTVNDKQVQV	518
Qy	531	YGYGRNFPEYLKFGELISVGTSNSVPLQGERTATTGKAVPKTGATVLYLGWNVGYTGKDSS	590
Db	519	-CCSNLEHUKFGSISIGDSNSVPLQGERTATTGKAMPVGNKRYGTWAGYTGSGNT	576
Qy	591	KSFNPAQDYAD-----FDIDFEGKSVKGRLLTTRKRD--PVFNITGDIAGNGWTKAST	642
Db	577	SKGVEAQKFDADNAAEFDVDFAKSLGKLIPINTSDGKSAFDATIDGNGFSSKANT	636
Qy	643	TKADGGYKIDSSSTGKS-IVIKDADEVTTGGFYGNMANEMGGSFTHTND----DSKASVY	696
Db	637	PDIKGGKLKDSDKNTESGRVIVKDAVVTGGFYGPQANELEGGSFTYKSNDAEKDSASVY	696
Qy	697	FGTKRQEYVK 706	
Db	697	FGARKQQEVK 706	
RESULT 1.7			
US-09-050-584-51			
Sequence 51, Application US/09059584			
Patent No. 6440701			
GENERAL INFORMATION:			
APPLICANT: Myers, Lisa E			
APPLICANT: Schryvers, Anthony B			
APPLICANT: Harkness, Robbin E			
APPLICANT: Loosmore, Sheena M.			
APPLICANT: Du, Run-Pan			
APPLICANT: Yang, Yan-Pang			
APPLICANT: Klein, Michel H			
TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella			
NUMBER OF SEQUENCES: 60			
CORRESPONDENCE ADDRESS:			
ADDRESSEE: Sim & McBurney			
STREET: 6th Floor, 330 University Avenue			
CITY: Toronto			
STATE: Ontario			
COUNTRY: Canada			
ZIP: M5G 1R7			
COMPUTER READABLE FORM:			
MEDIUM TYPE: Floppy disk			
COMPUTER: IBM PC compatible			
OPERATING SYSTEM: PC DOS/MS-DOS			
SOFTWARE: PatentIn Release #1.0, Version #1.30			
CURRENT APPLICATION DATA:			
APPLICATION NUMBER: US/09/059,584			
FILING DATE: 14-APR-1998			
CLASSIFICATION:			
NAME: Stewart, Michael I			
REGISTRATION NUMBER: 24973			
REFERENCE/DOCKET NUMBER: 1038-794			
TELECOMMUNICATION INFORMATION:			
TELEPHONE: (416) 595-1155			
TELEFAX: (416) 595-1163			
INFORMATION FOR SEQ ID NO: 51:			
SEQUENCE CHARACTERISTICS:			
LENGTH: 712 amino acids			
TYPE: amino acid			
STRANDEDNESS: single			
TOPOLOGY: linear			
US-09-059-584-51			
Query Match Score 1884.5; DB 4; Length 712;			
Best Local Similarity 55.8%; Pred. No. 2.8e120;			

132 --- DVKYPDDDDV --- FAHDGSNNLAHKRDLQVTVGVLGTRKIELVFSHDK 179
 244 KTDDELWNLGPVGCFYNGTTAKELPLTDAAVKGHWDFMTDVAKORNRFSE-YKENLQA 302
 180 KTRDQFPAGWGVYFYQGSPAVLTLPTQ-TVTVKGWDFVSDAFNERTLLEDFTQENSSA 238
 303 --- GRYGASSKDEYNBLLTDEKPKPEYNGTGHSSFTVNPDKKLTGELPSNLQD 357
 239 TSNIPGNOQIGATSNHD--- ALVNRKVSGSER --- IAHSAAFTADFGSKLKSGLKNSGYV 292
 358 SRKGNV---TKTKEYDIDANIYGNRFRGSATASDKAEASKTKHPFTSDAKNSLEGGFYGP 414
 293 SRIENEQQDVKT-RYKDAIKGKRFVGSTAQEKSHTI---FGKDAIKRLEGGFFGP 346
 415 NAEELAGKPLTNDNKLKGFGYAKRESKAGKTEAALLDAYALGTFNKNATTFTPTKQK 474
 347 KAEELAGKLTDDNSLFFVGAKRESKGDKELETRFDAYKISTDSNK-----LEKETM 399
 475 DFGNAAKLLVGLGSTVIDLVP-----TGV-TKVNEFTKNPDSATNKAGBTMWNDKYVS 527
 400 DFGNAAVLLVLDGRQPLNVPESNAGTTGAGNTGNNEFISTDGSHLNKTNTHENKKYKOT 459
 528 VKTGTYGRNFYLUKFGL-----SFGTNSNSVFLGERTATTGK 566
 460 VCC---SNLVVYKFGSYGGOTTANDASNTAGAATTHNSTLTLNCHLFLGERTSLT--D 513
 567 AVPTKGTAKYLGNW-----VGYITGKOSKSFKNEA-QDVAFDPLDFEKSFKCKLTKY 618
 514 MAKQSGAARYKIGTQMNFNLSSKGQSYGSDGRSGRAEFDVNGGKTVGKFEDA 573
 619 DRQDPVFT-TGDIAGNGTGTGKASTTKADGGYKIDSSSGKSTVI--KDAEVVTGFFYGP 675
 574 DGIPALIMDSTKIEGNGFSTGATAK---GSLOLDKGSTGAGITVTFPTDVKDGFYGP 629
 676 NANMGGSPHTNTDDSKASVWFGTKRQE 703
 630 NAEBIGGTTSNGTGDVKVGFGAKRQE 657

RESULT 20
 Sequence 20, Application US/08613009A-20
 Patent No. 690576
 GENERAL INFORMATION:
 APPLICANT: Myers, Lisa E
 APPLICANT: Schryvers, Anthony B
 APPLICANT: Harkness, Robyn E
 APPLICANT: Loosmore, Sheena M.
 APPLICANT: Du, Run-Pan
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Klein, Michel H
 TITLE OF INVENTION: Transferrin Receptor Genes of Moraxella
 NUMBER OF SEQUENCES: 31
 CURRENT PRIORITY ADDRESS:
 ADDRESSEE: Sim & McBurney
 STREET: 6th Floor, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: M5G 1R7
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent In Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/613, 009A
 FILING DATE: 08 MAR 1996
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24973
 REFERENCE DOCKET NUMBER: 1038-542
 RESULT 21
 Sequence 26, Application US/08778570B
 Patent No. 6437096
 GENERAL INFORMATION:
 APPLICANT: Myers, Lisa E
 APPLICANT: Schryvers, Anthony B
 APPLICANT: Hartness, Robin E
 APPLICANT: Loosmore, Sheena M.

APPLICANT: Du, Run-Pan
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Klein, Michel H
 TITLE OF INVENTION: Transferrin Receptor Genes of *Moraxella*
 NUMBER OF SEQUENCES: 43
 CORRESPONDENCE ADDRESS:
 ADDRESSSEE: Sim & McBurney
 STREET: 6th Floor, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: MSG 1R7
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent in Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/778,570B
 FILING DATE: 03-JAN-1997
 CLASSIFICATION: 536
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24973
 REFERENCE/DOCKET NUMBER: 1038-664
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 26:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 601 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-778-570B-26

Query Match 23.1%; Score 852; DB 4; Length 601;
 Best Local Similarity 34.6%; Pred. No. 5.7e-50;
 Matches 234; Conservative 100; Mismatches 212; Indels 130; Gaps 27;

Qy 63 GETNSGSGANT----PEPKYKDVPDTDENKDEVSIGIOPAMGYGMALSKMNLH---- 112
 Db 24 GGGSPFDLSVETVQDMHSKPKYDEKSQPBESQDVSSENSGAYGPAVILPARNAHFNPKY 83

Qy 113 KQODTPDDEKDLITLGKQVAKGEKSPLPSSLDVENKLDDGYIAKMNIEADKNAIGDRK 172
 Db 84 KEKHKPLGSMW----WKKLQRGE--PNSPS-----E 108

Qy 173 KDNKDKSLSKABLAQKIEDVRSKSFQVQVSSLKNNK1FHSNDGTTKATRDLQVYDGY 232
 Db 109 RDELEKRGSSSELIESKWDGQ----SRVY-----GYTNFT----YVRSGY 146

Qy 233 YLVNDGNYLTYKTDLWNLGPVGGVYNGTTTAKELPTDQDAVKYKHWDFMTDVAKQRNR 292
 Db 147 VYLNKNN-IDIK-NNIVLFGPDGLYKKGPKSPKELPS-EKITYKGTVWDVFTD-AMERQR 202

Qy 293 FSEVKENLQAGRRYGGASSKDEYNRLLTDKKNKPERVNG--EYGHSSSEFTVNFKDKKLTGE 350
 Db 203 F-EGLGSAAGGDKGSALESREGVL---RHAQAEASSGHTDFGMTSEFEYDFSDKTIKGT 257

Qy 351 LFSN---LQDSRKGNVTKTRYIDANIYGNRFRGSGATASDKAEASKRKPFTDAKNSL 407
 Qy 258 LYRNNRITQNSENKQIKTRYTQATLHGRFKGKALAADKG-ATNGSHPFIDS-DSL 315

Qy 408 EGGFYGPNAEELAKPFLTDNKLFLGFVGFGRKESK----AGEKTEAIIIDAYALGTENKN 461
 Db 316 EGGFYGPKEELAKPFLSDNKLFLGFVGFGRKESK---- 369

Qy 462 NATTPTPPTKQLDNFGNAKVLGLSTV1DLYPTGUTKDNNEFTKNPDSATNKGETLM 521
 Db 370 --TGBEEFKKEQIDSTFGDKVLLDGVESLILP-----SEGNAZAFQHE 410

Qy 522 VNDKVSVKTYGYRNPEYLKFGELSYTSNSVFLQGERATTGKAVPTKGAKYLGNNWV 581

Db 411 I-EQNGVKATVCCSILDYNSMFGKLSKENKDDMFQLGVRTPVS-DVAARTEANAKYRGTVWY 468
 Qy 582 GYIT----GKDSSKSFNEAQDVPVNTGDAJNGW 636
 Db 469 GYIANGTWSNGEASQFTEGNRRAFDVDFSTKKSGLTAKDRTPAFTTAMMKDNGP 528
 Qy 637 TGKASTTKADAGGYKIDSSSTGKSVIK-DAEVTCGFYGPBNANEGGSFTH----NTDD 690
 Db 529 SGVARTGE--ANGFLDPQTNGSYHTRATVSGGYGNAIEPGGSFSFPGNAPEGKQ 585
 Qy 691 SKASVYFGTKRQEYVK 706
 Db 586 EKASTVFGAKRQQLVQ 601

RESULT 22
 US-09-059-584-26
 ; Sequence 26, Application US/09059584
 ; Patent No. 6440701
 ; GENERAL INFORMATION:
 ; APPLICANT: Myers, Lisa E
 ; APPLICANT: Schryvers, Anthony B
 ; APPLICANT: Harkness, Robin E
 ; APPLICANT: Loosmore, Sheena M.
 ; APPLICANT: Du, Run-Pan
 ; APPLICANT: Yang, Yan-Ping
 ; APPLICANT: Klein, Michel H
 ; TITLE OF INVENTION: Transferrin Receptor Genes of *Moraxella*
 ; NUMBER OF SEQUENCES: 60
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Sim & McBurney
 ; STREET: 6th Floor, 330 University Avenue
 ; CITY: Toronto
 ; STATE: Ontario
 ; COUNTRY: Canada
 ; ZIP: MSG 1R7
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent in Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/059,584
 FILING DATE: 14-APR-1998
 CLASSIFICATION:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/778,570
 FILING DATE: 03-JAN-1997
 CLASSIFICATION:
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24973
 REFERENCE/DOCKET NUMBER: 1038-794
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 26:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 601 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-09-059-584-26

Query Match 23.1%; Score 852; DB 4; Length 601;
 Best Local Similarity 34.6%; Pred. No. 5.7e-50;
 Matches 234; Conservative 100; Mismatches 212; Indels 130; Gaps 27;

Qy 582 GYIT----GKDSSKSFNEAQDVPVNTGDAJNGW 636
 Db 469 GYIANGTWSNGEASQFTEGNRRAFDVDFSTKKSGLTAKDRTPAFTTAMMKDNGP 528
 Qy 637 TGKASTTKADAGGYKIDSSSTGKSVIK-DAEVTCGFYGPBNANEGGSFTH----NTDD 690
 Db 529 SGVARTGE--ANGFLDPQTNGSYHTRATVSGGYGNAIEPGGSFSFPGNAPEGKQ 585
 Qy 691 SKASVYFGTKRQEYVK 706
 Db 586 EKASTVFGAKRQQLVQ 601

113 KQDTPLDKEIDITLDGKIKQVAKGEKSPLPFSLDVENKLLDGYIAKMNADKNAIGDRIK 172
 84 KEKHPLGND-----WKKLQRG-----PSFS-----: E 108

173 KDNOKSLSKAELAKOIKEDRKSHBFOQVLTSSLKNNKPHSNDGTTKATTRDQYDVGY 232
 109 RDELEKKRGSSELISKMWDQ----SRVY-----: YVRSGY 146

233 YLVNDGNYLTVKTDELWNLGPVGAFYNGTTTAKELPTQDAVKGKHNIDEMTDVAKORN 292
 147 VYLNQKN-IDIK-NNIVLFLGPDGLYKKGKBPSEKLP-----: AMEIKR 202

293 PSEVKENLQGRRYGAASSDNEYRNLLTDKNGKPERYNG--EYGHSSSEPTYNPKDKKLGE 350
 203 P-EGLGSAAAGDKSKSALSALEGVL---RNQAAASSGTDFEYDSEFVYDSEPKTIGT 257

351 LFSN---LQDSRKGHNVTKTRYDIDANITYNFRGSSATASDKABSKTHPFTSDAKNSL 407
 258 LYRNRRITQNSENQIKTRYTICATLHNRFCKKALLADKG-ATNGSHPFLSDS-DSL 315

408 EGGFYGPNAEFLAKGFLTNDKFLGVFGAKRESK----: AGEKTEAII DAYA LGTENRN 461
 316 EGGFYGPKGFLAKGFLSNIDKVAVFQAKQDQDGENAAGPATETVDAYR-----: 369

462 NATTFPPTKKQLDNFGNAKKLVLGSTDVLPVGTVKDYNFETFKNPKPSATNKAGETIM 521
 370 ---TGBEEFKEQDIEQDGFVDRKLVLGVESLLP-----: SEGNAFAQDE 410

522 VNDKVSVKTYGGRNFEYLGKFLGELSVGTNSVFLQGERTATTGKAVPPKGTKAYLGNNV 581
 411 I-EQONGVKATVCCSNLDYMSFGKLSKENKDDMFQGVRFPV-----: DVAARPEANAXYRGTVY 468

582 GYIT---GRDSSKSFSNEAQDVADEFDIEFEKSKYKGKLTTKDRODPVNITGDIAGNW 636
 469 GYIANGTWSGEASQFTEGNRABEDVDP1STKKSITJAKDTSPATITAMIKDNGF 528

637 TGKASTTKAADGGYKIDSSTSGKSLVIK-DAEVTCGGFYGPNAEMGGSTH----: NTID 690
 529 SGVAKTGE---NGFALDQPTQGNSHYTHBATVSGFYKRNATIEMGGSFSFGNAPEGKQ 585
 691 SKASVYFGTRQEEVK 706
 586 EKASVYFGAKRQQLVQ 601

RESULT 23
 US-08-448-194-2
 Sequence 2, Application US/08448194
 Patent No. 6028049
 GENERAL INFORMATION:
 APPLICANT: LEGRAIN, Michelle
 APPLICANT: MAZARIN, Veronique
 APPLICANT: BOUCHON, THEISEN, Bernadette
 APPLICANT: SCHRYVERS, Anthony B.
 APPLICANT: BLOCH, Marie-Aline
 TITLE OF INVENTION: DNA FRAGMENTS CODING FOR THE TRANSFERRIN
 NUMBER OF SEQUENCES: 62
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Burns, Doane, Swecker & Mathis
 STREET: P.O. Box 1404
 CITY: Alexandria
 STATE: Virginia
 COUNTRY: United States
 ZIP: 22313-1404
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/448,194

1 FILING DATE: 23-MAY-1995
 CLASSIFICATION: 435
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US 08/361,469
 FILING DATE: 22-DEC-1994
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US 08/078,053
 FILING DATE: 18-JUN-1993
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: PR 92 07493
 FILING DATE: 19-JUN-1992
 ATTORNEY/AGENT INFORMATION:
 NAME: McGowan, Malcolm M.
 REGISTRATION NUMBER: 39,300
 DOCKET NUMBER: 016100-005
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (703) 836-6620
 TELEFAX: (703) 836-2021
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 599 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-448-194-2
 Query Match 22.9%; Score 844; DB 3; Length 599;
 Best Local Similarity 34.7%; Pred. No. 2e-49;
 Matches 234; Conservative 98; Mismatches 214; Indels 18 128; Gaps 27;
 Qy 63 GGTNGTGSANT---: PEPKYYKDVPTEDKKDEVSGIOPANGYGMALKSMKMLH-----: 112
 Db 24 GGGSFDLDEVEVTYQDMHMSKPKYDEKSEPOESQDPSGAAVYPLPRVIAHFNPVY 83
 Qy 113 KQDTPLDKEDTITLDGKQVAKGBKSPLPFLDVENKLLDGYIAKMNADKNAIGDRIK 172
 Db 84 KERHKPLGMSD----: WKKLQRG-----: 108
 Qy 173 KDNOKSLSKAELAKQKEDVRSKHEFQOYLSL1KNNKLFHSNDGCTKATRDLQYDVGY 232
 Db 109 RDELEKKRGSSELLBSKWDGQ-----: SRV-----: GYTNFT-----: YVRSGY 146
 Qy 233 YLVNDGNYLTVKTDELWNLGPVGTVKDYNFETFKNPKPSATNKAGETIM 521
 Db 147 VYLNQNN-IDIK-NNIVLFGPDGYLYKKEPKSPLPS-EKTYKGTVWYVTD-AMEIKR 202
 Qy 293 FSEVKENLQGRRYGAASSGTDFEYDSEFVYDSEPKTIGT-----: EYGHSSSEPTYNPKDKKLGE 350
 Db 203 P-EGLGSAAAGDGSALSALEGVL-----: RNOQAEASSCTHDGFTMSEPEVDFSPKTIGT 257
 Qy 351 LFSN---LQDSRKGHNVTKTRYDIDANITYNFRGSSATASDKABSKTHPFTSDAKNSL 407
 Db 258 LYRNRRITQNSENQIKTRYTICATLHNRFCKKALLADKG-ATNGSHPFLSDS-DSL 315
 Qy 408 EGGFYGPNAEFLACKFLNDKFLGVESLLP-----: AGEKTEAII DAYA LGTENRN 461
 Db 316 EGGFYGPKGFLAKGFLSNIDKVAVFQAKQDQDGENAAGPATETVDAYR-----: 369
 Qy 462 NATTFPPTKKQLDNFGNAKKLVLGSTDVLPVGTVKDYNFETFKNPKPSATNKAGETIM 521
 Db 370 ---TGEFPKEQIDSFGDVKLVLGVESLLP-----: SEGNAFAQDE 410
 Qy 522 VNDKVSVKTYGGRNFEYLGKFLGELSVGTNSVFLQGERTATTGKAVPPKGTKAYLGNNV 581
 Db 582 GYI---TGKDSSKSFSNEAQDVADEFDIEFEKSKYKGKLTTKDRODPVNITGDIAGNGTG 638
 Db 411 I-BQNGVKATVCCSNLDYMSFGKLSKENKDDMFQGVRFPV-----: DVAARTEANAKYRGTVY 468
 Db 469 GYIANGTWSGEAQNQEGNRAEDVDFSTKKSITGSLTAKDRTSPAFITAMIKDNGFEG 528
 Qy 639 KASPTKADGGYKIDSSSTGKSIIVK-DAEVTGGFYGPNAEMCGSFH----: NTDDSK 692
 Db 529 VAKTGE---NGFALDQPTQGNSHYTHBATVSGFYKRNATIEMGGSFSFGNAPEGKQ 585

Qy 693 ASVVFGTKRQBEVK 706
 Db 596 ASVVFGAKRQQLVQ 599

RESULT 24
 US-08-867-921-2
 Sequence 2, Application US/08867921
 Patent No. 6326350

GENERAL INFORMATION:
 APPLICANT: JACOBS, Eric
 APPLICANT: LEGRAIN, Michelle
 APPLICANT: MAZARIN, Veronique
 APPLICANT: BOUCHON-THEISEN, Bernadette
 APPLICANT: SCHRYVERS, Anthony B.
 APPLICANT: BLOCH, Marie-Aline
 TITLE OF INVENTION: DNA FRAGMENTS CODING FOR THE TRANSFERRIN
 TITLE OF INVENTION: RECEPTOR OF NEISSERIA MENINGITIDIS
 NUMBER OF SEQUENCES: 62
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS
 STREET: P.O. Box 1404
 CITY: Alexandria
 STATE: VA
 COUNTRY: USA
 ZIP: 22313-1404

COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/867,921
 FILING DATE: 03-JUN-1997
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/445,472
 FILING DATE: 22-MAY-1995
 APPLICATION NUMBER: US 08/361,469
 FILING DATE: 22-DEC-1994
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/078,053
 FILING DATE: 18-JUN-1993
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: FR 92 07493
 FILING DATE: 1-JUN-1992
 ATTORNEY/AGENT INFORMATION:
 NAME: McGowan, Malcolm K.
 REFERENCE/DOCKET NUMBER: 016100-004
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (703) 836-6620
 TELEFAX: (703) 836-2021
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 599 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-867-921-2

Db 84 KECHEKPLGSMD-----WKKLQLQRGS-----E 108
 Qy 173 KDNKQDSLAKAQLQIKEDVRKSHEFQQLSSLRKNKIFHSNDGFTKATRDLQVVDGY 232
 Db 109 RDELEKKRGSSEELLSKWEQG-----SRVY-----YVRSGY 146
 Qy 233 YLVNDGNYLTVKTDLBNLQPGVGVFVNGTTAKBLPLTODAVKYGKHWDFMTDVAKQRNR 292
 Db 147 VYLNKN-1D1K-NN1VLFPGDGYIYKGREPSKRLPS-EXITYGTVTD-AMEKQR 202
 Qy 293 FSEVKENLQAGRYGASSKDEYNRLTDEKPKPERYNG--BYGHSESEFTYNFKDKKLGTG 350
 Db 203 F-BGLGSAAGDKSALSALSAEFGV-----RNQAEASSGHTDFGMSEFEYDFSDKTRKG 257
 Qy 351 LPSN--LQDSRKGNVTKRKYDANIYGNFRGASATADKAESKTRKPFSTSARKNSL 407
 Db 258 LYRNMRITQNNSENQIKTRTRYQTALHGNRFRGSKALADKG-FATNGSHPFISISSL-DSL 315
 Qy 408 EGGFYGPNAEELAGKFLTDNKLPGVFGAKRESK-----AGEKTBAILDAYALGTENKN 461
 Db 316 EGGFGPKGKGELLAGFLSNSNWKVAVFGAKQDKDGENAGPATETVYDRI-----369
 Qy 462 NATTFTPFTKKQLDNFGNAKLVLGSTVIDLVPTGVTDNEFTNPKPDSATNKGATLTM 521
 Db 370 ---TGEFFKCEQIDFGVDRKLLVNGVELSLLP-----SEGNKAFOHE 410
 Qy 522 VNDKRSVKTGKYGRAPEYLRFGEISVGTSNSVFLGERTATTGEAUPITGATKLGNWV 581
 Db 411 I-EQNGVKATVCCSNDYMSFGKLSKENKDDMFLQGVRTFVS-DVAARTEANAKYRGTWY 468
 Qy 582 GYI--TGKDSKSSPNEAQDADPFDIFEFKSKVKGSKLTTKDRDQPVENITGDIAGNGWTG 638
 Db 469 GYIANGTWSWGEASHEQGGNRAEFFVDFSTKKSITGLAIDRTSAAFTAMIKNGFSG 528
 Qy 639 KASTTKADAGSYKIDSSSTGSKSIVK-DAEVTTGGYGPNAEMGGSFTH----NTDDSK 692
 Db 529 VAKTGB--NGFALDPQNTNSHVTIEATVSGGYQNAIEMGGSFSFPGNAPBSKQBK 585
 Qy 693 ASVUVGTRKROBEVK 706
 Db 586 ASVVFSAKROQLVQ 599

RESULT 25
 US-08-448-194-61
 Sequence 61, Application US/08448194
 Parent No. 6028049

GENERAL INFORMATION:
 APPLICANT: JACOBS, Eric
 APPLICANT: LEGRAIN, Michele
 APPLICANT: MAZARIN, Veronique
 APPLICANT: BOUCHON-THEISEN, Bernadette
 APPLICANT: SCHRYVERS, Anthony B.
 APPLICANT: BLOCH, Marie-Aline
 TITLE OF INVENTION: DNA FRAGMENTS CODING FOR THE TRANSFERRIN
 NUMBER OF SEQUENCES: 62
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Burns, Doane, Swecker & Mathis
 STREET: P.O. Box 1404
 CITY: Alexandria
 STATE: Virginia
 COUNTRY: United States
 ZIP: 22313-1404
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatientIn Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/448,194
 FILING DATE: 23-MAY-1995

Query Match 22.9%; Score 844; DB 3; Length 599;
 Best Local Similarity 34.7%; Pred. No. 2e-49;
 Matches 234; Conservative 98; Mismatches 214; Indels 128; Gaps 27;

Qy 63 GGTNSCTGSGANT-----PEPKYKDVTDPENKDEVSIGIOPAMGYGMAISKOMNLH-----112
 Db 24 GCGSFIDLSVETVQDMHKSPKYEDEXKSQPEQQDVSENNSGAYFPAVKPRRNHAENPKV 83
 Qy 113 KQQDTPLDKDLITLGKQVAKGEKSPLPFSLDVENKLDDGYIAKNNADKNAIGDRK 172

CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/361,469
 FILING DATE: 22-DEC-1994
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/078,053
 FILING DATE: 18-JUN-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: FR 92 07493
 FILING DATE: 19-JUN-1992
 ATTORNEY/AGENT INFORMATION:
 NAME: McGowan, Malcolm M.
 REGISTRATION NUMBER: 39,300
 REFERENCE/DOCKET NUMBER: 016100-005
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (703) 836-6620
 TELEFAX: (703) 836-2021
 INFORMATION FOR SEQ ID NO: 61:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 578
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 US 08-448-194-61

Query Match 22.8%; Score 840.5; DB 3; Length 578;
 Best Local Similarity 34.6%; Pred. No. 3 3e-49;
 Matches 233; Conservative 98; Mismatches 214; Indels 129; Gaps 27;

Qy 693 ASVYFGTKRQEYK 706
 Db 565 ASVYFGAKRQLVQ 578

RESULT 26
 US-08-867-921-61
 / Sequence 61, Application US/08867921
 / Patent No. 6326510
 / GENERAL INFORMATION:
 / APPLICANT: JACOBS, Eric
 / APPLICANT: LEGRAIN, Michele
 / APPLICANT: Mazarin, Veronique
 / APPLICANT: BOUCHON-THIBISEN, Bernadette
 / APPLICANT: SCHRYVERS, Anthony B.
 / APPLICANT: BLOCH, Marie-Aline
 / TITLE OF INVENTION: DNA FRAGMENTS CODING FOR THE TRANSFERRIN
 / NUMBER OF SEQUENCES: 62
 / CORRESPONDENCE ADDRESS:
 / ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS
 / STREET: P.O. Box 1404
 / CITY: Alexandria
 / STATE: VA
 / COUNTRY: USA
 / ZIP: 22313-1404

COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent In Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/867,921
 FILING DATE: 03-JUN-1997
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/445,472
 FILING DATE: 22-MAY-1995
 APPLICATION NUMBER: US 08/361,469
 FILING DATE: 22-DEC-1994
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/078,053
 FILING DATE: 18-JUN-1993
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: FR 92 07493
 FILING DATE: 19-JUN-1992
 ATTORNEY/AGENT INFORMATION:
 NAME: McGowan, Malcolm K.
 REGISTRATION NUMBER: 39,300
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (703) 836-6620
 TELEFAX: (703) 836-2021
 INFORMATION FOR SEQ ID NO: 61:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 578 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 US-08-867-921-61

Qy 63 GTTNSGTGSANT----PEPKYDPTDDEKDKDEVSQIQLQEPAMGYGMAUSKMNHL----112
 Db 4 GGGSFOLDSVETQDMHSPKXPKYEDERSQPKQPSQDVSSENSSAAYGPAVKPRRNHFNPKY 63

Qy 63 KQDTPPLDEKDIITLDGKQVAKGEGKSPPLPSLDSVNLKLDGYIAKMNEADKNAIGDRRK 172
 Db 64 KEKHKPLGSD----WKLQRGE--PNSFS-----88

Qy 173 KDNKDKSLSKAELAKOIKEDYRKSHFBOQVUSSLKRNKIFISNDGTTKATRDLQYDGY 232
 Db 89 RDELEKRGSSSELISKSKWEDGQ---SRVY-----GYTNFT----YVRSGY 126

Qy 233 YLVNDGNYLTKRTDELWNLGPVGYYFYNGCITTAKEPLTDQAVKORR 292
 Db 127 VYLNKNN-IDIK-NNIVLPLGDFGLYIKGRPSKELPS EKIVYKGTWVXTD-AMEKOR 182

Qy 293 PSEVKENLQAGRRYGAASSKOEYNRLLTDEKDKPERRY- EYGHSSSEPTYNPKDKKLGE 350
 Db 183 FE--GGSAAGDKSGALSALEEGVL---RNQAEASSGHTDFGHTSEFVDFSDTIXKT 236

Qy 351 LFSN---LQDSRKGNVTKTRYDIDANIYGNRFRSSATASDKEASKTKHPTSDAKNSL 407
 Db 237 LYRNNRITQNSENKOIKTRYTQATLGNRPGKALLADKG-ATNGSHPFISDS-DSL 294

Qy 408 EGGFYGPNAEPLAGKPLTDNKLKGFGYGAKEKRESK----AGEKTEAILDAYALGTFNKN 461
 Db 295 EGGFYGPKEEPLAGKPLSDNDRKVAAVFGAKQDKDGENAAGPATEVDAYRI----348

Qy 462 NATTFPTPKQLDNFGNAKKVLGLSTVIDLVPVTGVTKDNNEFTKPKPSATNKAGETLM 521
 Db 349 ---TGEFFKQEQIDSGDVKRKLIVDCVLSLPL-----SEGNAFAQDE 389

Qy 522 VNDKVSVKTYGRNPFYLGELSVGTSNSVLOGERTATTGEKAVPPTGKTAKYLGNNV 581
 Db 390 I-EQONGVKATVCCSNLDYMSFGKLSKENKODMFLQGVTPV5-DVAARPEANAKYRTWY 447

Qy 582 GYI---TGKDSKSFNEADQVADFDLDEKVKSGKLTDROPEVNTGDIAGNGNTG 638
 Db 448 GYIANGTSWSSEBASNOEGNAAEFDVFSTKKSICSLTAKDRTSAPTTAMIDKNGFSG 507

Qy 639 KASTTKADAGGYKIDSSSTGKSVIK-DABTGGFYYGPANEMGGSFTH----NTDDSK 692
 Db 568 VAKTGE--NGFALDPQNTGNSHYTHEATSGGFYKNAITEMGGSFSPEGNAPEGKQEK 564

Qy 63 GTTNSGTGSANT----PEPKYDPTDDEKDKDEVSQIQLQEPAMGYGMAUSKMNHL----112
 Db 4 GGGSFOLDSVETQDMHSPKXPKYEDERSQPKQPSQDVSSENSSAAYGPAVKPRRNHFNPKY 63

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; APPLICATION NUMBER: US/08/487,890
; FILING DATE: 07-JUN-1993
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/175,116
; FILING DATE: 29-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/148,968
; FILING DATE: 08-NOV-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Stewart, Michael I
; REGISTRATION NUMBER: 24,073
; REFERENCE/DOCKET NUMBER: 1038-466 M
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1163
; TELEFAX: (416) 595-1165
; INFORMATION FOR SEQ ID NO: 97:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 598 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-487-890-97

Query Match          22.6%; Score 8333
Best Local Similarity 34.7%; Pred. No. Mismatches
Matches 234; Conservative 98; Mismatches
Qy          63 GTTNSGTTGSAINT-----PPPKYKDVPPTDDE
Db          24 GGGFDLDSVETVQDMHSPSKPYEDEBKSKQP
Qy          113 KQDQTPDLDEKDIITLDGKQKVAKGEKSPPKP
Db          84 KEKHkPLGSM-----WKLQLQKB-----PM
Qy          173 KDNKDKDSLKAELAQIKEDVRSKSHFQQ
Db          109 RDELEKKRGSSELLESKWNWDGQ-----SR
Qy          233 YLVNDGNYLTVKTDDELWNPGVGVFTNG
Db          147 VYLNKNN- IDIK-NNIVLPGDGYLYKK
Qy          293 FSEYKENLQDGARYGASSKDEYNRLLTDE
Db          203 F-----GGGSAACGDGSQSALAEGVY-----V
Qy          351 N-----LFSN--LQDPSRKGNVTKTKYRDIIDANIV
Db          258 LYRNRRITQNSENKQIITTRYTQATLH
Qy          408 EGGFGYPNAEELACKFLTDNNKLFGVFGKA
Db          316 EGGFGPCKPGEBLAGKPLSNDNKAIAVFGA
Qy          462 NATTTFPKQLDNFGNAAKKLVGSTVY
Db          369 ---TGBEEPKCEQDSFGDVKLQYDGVEL
Qy          522 VNDKVSPTKTYGRNFPEYKJPGELUSGTS
Db          410 I-EQNGVKATVCCSNLDYNSFGKLUSKENW
Qy          582 GYI---TGKDSKSFNEAQDVADEFIDF
Db          468 GYIANGTSNSGEASNQEGGNAEIDVDFE
Qy          639 KASTTKADAGYKIDSSSTGSKSIVIK-D
Db          528 VAKTEB--NGFALDQNTQNSHYYTHIE
Qy

```

RESULT 28
 US-08-418-435-97
 Sequence 97, Application US/08478435
 GENERAL INFORMATION:
 APPLICANT: Loosmore, Sheena
 APPLICANT: Harkness, Robin
 APPLICANT: Schryvers, Anthony
 APPLICANT: Chong, Pele
 APPLICANT: Gray-Owen, Scott
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Murdin, Andrew
 APPLICANT: Klein, Michel
 TITLE OF INVENTION: Transferrin Receptor Genes
 NUMBER OF SEQUENCES: 147
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Sim & McBurney
 STREET: Suite 701, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: M5J 1R7
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentin Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/478,435
 FILING DATE: 07-JUN-1995
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/337,483
 FILING DATE: 08-NOV-1994
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/175,116
 FILING DATE: 29-DEC-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/148,968
 FILING DATE: 08-NOV-1993
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24,973
 REFERENCE/DOCKET NUMBER: 1038-462 MIS:vg
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 97:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 598 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-418-435-97

Query Match 22.6%; Score 833.5; DB 2; Length 598;
 Best Local Similarity 34.7%; Pred. No. 1e-18;
 Matches 23; Conservative 96; Mismatches 213; Indels 129; Gaps 28;

Db 585 ASVYEGAKRQOLVQ 598

Db 109 RDELEKKRGSSSELLTESKWEQGQ --- SRV --- GYNTF --- YVRSGY 146

Qy 233 YLVNDGNYLTVKTDELNIGPVGGYFYNGTTAKELPTDADVKKGHDPMTDVAKQRNR 292

Db 147 VYLNKN-1D1K-MN1VLPFDGILYKKGKEPSLEPS-EKITYKGTDVYTD-AMEKQR 202

Db 293 FSEYKENLQAGRYGASSKDEYNRLLTDEBNKPERYNG- EYGHSSSEFTYNFKDRLKTGE 350

Db 203 F-EGLGSAAGGDKSCSALSALBEGV --- RNCQAES SGHDFGTSSEFEYDFSDKTK1KG7 257

Qy 351 LFSN - - LQDSRKGNVTKYKRDIDANVYGNRFGSATASDKAESKTKRPFSDARKNSL 407

Db 258 LYRNRTTONSENQKIKTRTYTQATLHGNRFKGKALADKG- ATNGSHPFISDS-DSL 315

Qy 408 EGGFYPGNABELAGKFLTNNDNKLPGFVGAYRESK- - - AGEKTBAILDAYALCTENRKN 461

Db 316 EGGFTGPKGKGEELAGFLGSNLSNPKVDAFGAKQDKDGENAGPATE-VDAYRI --- 368

Db 369 ---TGBEFKCEQIDSFGDVYKLLVDGVELSLLP --- --- --- --- SEGNKKAQFQE 409

Qy 522 VNDKVSVKYGYGRNFYLKFGELSVGTNSNSVLOGERATTGKAVPFTGKTAVKLYGNWV 581

Db 410 I-EQNGVKATVCCSNLDMFSGKLUSKENKDDMFLOGVRLPEVS - DVAARTANAKYRGTVWY 467

Qy 582 GYI -- TGKDSKSKSPNEAQDVFID1DFEKKSVRGKLTTKDQRDPVNFTGDIAGNGWTG 638

Db 468 GYIANGTWSWGEASNQEGNRAEFVDFSTKKSOTLTAKDRTSHPFTTAMIKONGFSG 527

Qy 639 KASITKADAGGYKIDSSTGKSTIVK-DAEVTTGGYGPNAEMGGSTH --- NTDDSK 692

Db 528 VAKTCB --- NGFALDQNTNSHHTIEAVSGGYKNAIEMGGSFSFGNAPEGKQEK 584

Qy 693 ASVWFGTKRQEVK 706

Db 585 ASVWFGAKRQQLVQ 598

RESULT 29
 US-08-337,483-97
 Sequence 97, Application US/08337483
 Patent No. 5922562
 GENERAL INFORMATION:
 APPLICANT: Loosmore, Sheena
 APPLICANT: Harkness, Robin
 APPLICANT: Schryvers, Anthony
 APPLICANT: Chong, Pele
 APPLICANT: Gray-Owen, Scott
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Murdin, Andrew
 APPLICANT: Klein, Michel
 TITLE OF INVENTION: Transferrin Receptor Genes
 NUMBER OF SEQUENCES: 147
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Sim & McBurney
 STREET: Suite 701, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: M5J 1R7
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentin Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/478,435
 FILING DATE: 07-JUN-1995
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/337,483
 FILING DATE: 08-NOV-1994
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/175,116
 FILING DATE: 29-DEC-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/148,968
 FILING DATE: 08-NOV-1993
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24,973
 REFERENCE/DOCKET NUMBER: 1038-462 MIS:vg
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 97:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 598 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear

Db 63 GGTTNGTGSANT----PEPKYKVPTDENKDEYSGIQRPMGYGMAALKMNLH---- 112

Db 24 GGGSFSDLSDSTBTQDMHSKVYEDKSQPSQDVSENCAAYGPAVKKLFRRNAAHFNPKY 83

Qy 113 KQQDTPLEDEKDIITLDGKKGKVAKEGKSPLEPSLDVENKLIDGYIAKMNEADKNAIGDRK 172

Db 84 KEKHPKLGSMD----WKLQRG --- PNSFS --- E 108

Qy 173 KDNKDKSLSLAAKQIKEYDVKRSHEFOQVLISSLKNIKIFHSNDGTTKATTRDLOVYDGX 232

Qy

REGISTRATION NUMBER: 24,973
 REFERENCE/DOCKET NUMBER: 1038-410 MIS:jb
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1115
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 97:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 598 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-337-483-97

Query Match 22.6%; Score 833.5; DB 2; Length 598;
 Best Local Similarity 34.7%; Pred. No. 1e-48;
 Matches 234; Conservative 98; Mismatches 213; Indels 129; Gaps 28;

Qy 63 GGTNSCTGGSANT-----PEPKYKDVPTDENKDEVSQIQQEPAMGYCMAKSLKMNHLH-----112
 Db 24 GGGSFEDLSVETQDGHSPKPYEDEKSPQBPESQQDVSNSGRAYPAVKPRRNAAENPKV 83

Qy 113 KQDQTDLDEKDILITLQDKQVAKGEKSPSLPSSLDVVKLLDGYIAKMNEDKNAIGDRK 172
 Db 84 KEKHKPLGSM-----WKLQRG-----PNSS-----E 108

Qy 173 KDNKDKSLSKAELAKQIKEYVRKSHEFQVQVLSSLNKRNKFHSNDGTTKATRDLQVTDGY 232
 Db 109 RDELEKKRGSSBLLIESKWDQ-----SRVY-----GTINFT-----YVRSGY 146

Qy 233 YLVNDGNYLTVKTDELWNLGPVGVYFNGVTTAKELPLPTODAVKYKGHMDFMTDVAKORN 292
 Db 147 VYLNKNN-IDIK-NNTIVLFGDGYLGYKGPKSPKELPS-EXITYGTWVYTD-AMEKOR 202

Qy 293 FSEVKENLQARYYKGASSKDEYRNLITDEKRNKPVERP- EYGRHSESEFTINFKDKKLGE 350
 Db 203 F-EGLSAAGGDKSGALSALEFGVL---RNQABASSGHTEFGMSESEFTEDFSDTKIGT 257

Qy 351 LFSN---LQDSRKGNVTKTKRYDIDANTYGNTRFRGSATASDRAEASKTKRHPFTDAKNSL 407
 Db 258 LYRNNNITQNSNENKQIKTTTYYQATLHGRFKGALKADKG-ATNGSFRFISOS-DSL 315

Qy 408 EGGFYGPNAAEPLAKGFLTDNKLKGFGVFGAKRESK-----AEGKTEAII DAYALGTENKN 461
 Db 316 EGGFYGPKGKEEPLAKPLNSDNRKVAAYFGAKOKDKDGENAAGPATE-VIDAYRI-----368

Qy 462 NATTFPFTKQDNEFGNAAKLLVGLSTVILVLPVGTKDNEFTNKPDATNKAGETLM 521
 Db 369 ---TGEFFKKEQIDSFDVKLLVLDGVESLULP-----SEGNNKAFOHE 409

Qy 522 VNDKVSVKTGTYGRNPFYLFKEGELSGVTSNSVFLQGERTATTGKAVPTKGTAKYLGNNV 581
 Db 410 I-FEONGKATVYCCSNMDYMSFGKSLXENKDMFLQVTPS-DVARTANAKRGTWY 467

Qy 582 GYI---TGKDSKSKPNEAQDADFDIPEKKSVKGKLTKDRODPVFNLTGDIANGWTRG 638
 Db 468 GYIANGTWSGEASNOEGNRAEFDVDFSTKKSIGLTAKDRTSPAITAMIKDONGFSG 527

Qy 639 KASITKADAGGKIDDSSTGKSVIK-----NNDDSK 692
 Db 528 VAKTGE---NGFALDQNTGNSHYTHEATVSGGFYGNKNAIEMGSSFSFFPGNAPEGKQBK 584

Qy 693 ASVVFGTKROEVK 706
 Db 585 ASVVFGTAKRQOLVQ 598

Query Match 22.6%; Score 833.5; DB 2; Length 598;
 Best Local Similarity 34.7%; Pred. No. 1e-48;
 Matches 234; Conservative 98; Mismatches 213; Indels 129; Gaps 28;

Qy 63 GGTNSCTGGSANT-----PEPKYKDVPTDENKDEVSQIQQEPAMGYCMAKSLKMNHLH-----112
 Db 24 GGGSFEDLSVETQDGHSPKPYEDEKSPQBPESQQDVSNSGRAYPAVKPRRNAAENPKV 83

Qy 113 KDNKDKSLSKAELAKQIKEYVRKSHEFQVQVLSSLNKRNKFHSNDGTTKATRDLQVTDGY 232
 Db 109 RDELEKKRGSSBLLIESKWDQ-----SRVY-----GTINFT-----YVRSGY 146

Qy 233 YLVNDGNYLTVKTDELWNLGPVGVYFNGVTTAKELPLPTODAVKYKGHMDFMTDVAKORN 292
 Db 147 VYLNKNN-IDIK-NNTIVLFGDGYLGYKGPKSPKELPS-EXITYGTWVYTD-AMEKOR 202

Qy 293 FSEVKENLQARYYKGASSKDEYRNLITDEKRNKPVERP- EYGRHSESEFTINFKDKKLGE 350
 Db 203 F-BGLGSAAGGDKSGALSALEFGVU---RNQABASSGHTEFGMSESEFTEDFSDTKIGT 257

RESULT 30
 US-08-478-373-97
 Sequence 97, Application US/08478373
 Application No. 552241
 GENERAL INFORMATION:
 APPLICANT: Loosmore, Sheena
 APPLICANT: Harkness, Robin

351 LFSN---L0DSRKGNVTKTAKYDIDANIYGNRFGSATASDKABASKTKHCPFTSDAKNSL 407
 258 LYRNRTTINSENKOIKTTRYTATLGNRFRCKALADKG-ATNGSHPFIDS-DL 315
 408 EGGFYGNPABELAGKPLTNDNKLFGVFGAKRESK----AGEKTEAIDDAYALGTFNKN 461
 316 EGGFYGPKGEBEAGKPLSNPKVAAVFGAKQKDGENAAGPATE-VDAYRI----- 368
 462 NATTFTPFTKQLDNFGNAKRLVLSGSTDVLVPTGVYDNEFTKKNPKPSATNKGETIM 521
 369 ---TGEFFPKKEQIDSFGDVKKLUDGVESLULP-----SEGKNAFAOHE 409
 522 VNDKVSXVTKTGYGRNFYEYLKFGELSVGTNSNSVFL0GERTATTGKAVPTKGTKAYLGNWV 581
 410 1-EQNSVKATVCCSNLUDYMSRGKLSKENDKDMFLGQVTPVS-DVAARTEANAKYRGTY 467
 582 GYI---TGKSSKSFNEAQDVADPFDIFEKSKVSKGLITKDRDQPVNITGDIAGNGWTG 638
 468 GYIANGTSSWGEASMQEGGNGRAEFDVDFSTPKKISCTSLTAKDRTSPAITAMIKDNGFSG 527
 639 KASITKADAGYKIDSSTSSTGKSIKIK-DAEVTGGFYGNPANEMGGSFTH----NTDDSK 692
 528 VAKTGB---NGFALDQNTGNSHYTHIAEVSGGYGRNAIEMGGSFSSPGNAPEGKQEK 584
 693 ASVYFGTKRQEEVK 706
 585 ASVYFGAKRQOOLVQ 598

RESULT 31
 US-08-474-671-97
 ; Sequence 97, Application US/08474671

; GENERAL INFORMATION:
 ; APPLICANT: Loosmore, Sheena
 ; APPLICANT: Harkness, Robin
 ; APPLICANT: Schryvers, Anthony
 ; APPLICANT: Chong, Pele
 ; APPLICANT: Gray-Owen, Scott
 ; APPLICANT: Yang, Yan-Ping
 ; APPLICANT: Murdin, Andrew
 ; APPLICANT: Klein, Michele
 ; TITLE OF INVENTION: Transferrin Receptor Genes
 ; NUMBER OF SEQUENCES: 147
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Sim & McBurney
 ; STREET: Suite 701, 330 University Avenue
 ; CITY: Toronto
 ; STATE: Ontario
 ; COUNTRY: Canada
 ; ZIP: MSG 1R7

COMPUTER READABLE FORM:

COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/474,671
 FILING DATE: 07-JUN-1995
 CLASSIFICATION: 530
 PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/337,483
 FILING DATE: 08-NOV-1994

CLASSIFICATION: 530
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/175,116
 FILING DATE: 29-DEC-1993

PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/148,968
 FILING DATE: 08-NOV-1993

NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24,973

Query Match 22.6%; Score 833.5; DB 3; Length 598;
 Best local Similarity 34.7%; Pred. No. 1e-48;
 Matches 234; Conservative 98; Mismatches 213; Indels 129; Gaps 28;
 63 GGTNGTGSANT----PEPKYKDPPTDENKDEVSQIQEPMGYSMALKSMNLH---- 112
 24 GGGSFDLDSVETVQDMHSSKPKYDEKSQPEQSODVSENSGAAVGFAVKLPRRNAAHENPKY 83
 Db 113 KQDDPLDEKD1TLDGKQQVAKEKSPLPFSLUDVENKLDDGYTAKNEADKNAIGDRIK 172
 84 KERKEPKPLGSM-----WKKLQRG-----PNSFS-----E 108
 Db 173 KDNKDKSLSKAELAKQIKEDVRSHEFQVQLSSLUKNKIFHSNDGTTKATTRDLOVYDGY 232
 Db 109 RDELEKQRSSELESKWEDQ-----SRV-----GYTNNT-----YVRSGY 146
 233 YLNDGNYLTVKTDELWNLGPVGFGFYNGTTIAKEPLQDAVKYKGHWDEMTDVAKQNR 292
 Db 147 VYLNKNN-1DIK-NNIVLFGPDGYLYYKGKEPSKELPLPS-EKLTYKGWMDYVTD-AMEKQR 202
 Qy 293 FSEYKLENLOAGRYGASSKXDEYNRLTDDEKNKBERYNG--EYHSSEPTVNFKDKJLGE 350
 Db 203 F-EGLGSAGGDGSALSALLEGVIL---RNQEAASSGHTDEGMTESEFVDFSDKTIRGT 257
 Qy 351 LFSN---LQDSRKGNVTKTAKYDIDANIYGNRFRGSATASDKAESTKTKHCPFTSDAKNSL 407
 Db 258 LYRNRTTINSENKOIKTTRYTATLGNRFRCKALADKG-ATNGSHPFIDS-DL 315
 Qy 408 EGGFYGPNAEELACKFLTNDNKLFGVFGAKRESK----AGEKTEAIDDAYALGTENKN 461
 Db 316 EGGFYGPKGSBELLACKFLSNDNKVAAVFGAKOKDKDGENAAGPATE-VIDAVRI----- 368
 Qy 462 NATTFTPFTKQLDNFGNAKRLVLSGSTDVLVPTGVYDNEFTKKNPKPSATNKGETIM 521
 Db 369 ---TGEFFPKKEQIDSFGDVKKLUDGVESLULP-----SEGKNAFAOHE 409
 Qy 522 VNDKVSXVTKTGYGRNFYEYLKFGELSVGTNSNSVFL0GERTATTGKAVPTKGTKAYLGNWV 581
 Db 410 1-BONGVAKTVCNSNLDMSFGKLSKENKDDMFQGVTPVS-JVAARTEANAKYRGTY 467
 Qy 582 GYI---TGKDSKSFNEAQDVAEDIDFEKKSVKGKLTTKDRDPPVNTGDIAGNGWTG 638
 Db 468 GYIANGTSSWGEASMQEGGNGRAEFDVDFSTKKSFGTLPAKDRTPSAFTITAMIKDNGFSG 527
 Qy 639 KASTTKADAGYKIDSSTGKSLVTKDNEFTKKNPKPSATNKGETIM 521
 Db 528 VAKTGB---NGFALDQNTGNSHYTHIAEVSGGYGRNAIEMGGSFSSPGNAPEGKQEK 584
 Qy 693 ASVYFGTKRQEEVK 706
 Db 585 ASVYFGAKRQOOLVQ 598

RESULT 32
 US-08-483-577A-97
 ; Sequence 97, Application US/08483577A.
 ; Patent No. 6015618
 ; GENERAL INFORMATION:
 ; APPLICANT: Losmore, Sheena
 ; APPLICANT: Harkness, Robin
 ; APPLICANT: Schryvers, Anthony

REFERENCE/DOCKET NUMBER: 1038-720
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 SEQUENCE CHARACTERISTICS:
 LENGTH: 598 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-897-438-97

Query Match 22.6%; Score 833.5; DB 3; Length 598;
 Best Local Similarity 34.7%; Pred. No. 1e-48;
 Matches 234; Conservative 98; Mismatches 213; Indels 129; Gaps 28;

Qy 63 GGTNGGTGSAANT----PEPKYDVTDPDKKDEVSIGIQPAMGYGMAISKMLH---- 112
 Db 24 GGGSPFDLDSVBTQDMHSKSKYEDKEKSQPESSQDVSSENCSAACGFAVKLPRRVAHENPKY 83
 Qy 113 KQDPLPLBDEBDIITLJGKQVAKGERKSPLPFSLOVENKLLDGYIAKMNBDKNAIGDRK 172
 Db 84 KEKHPPLGND----WKLQRGF--PNSF-----E 108

Qy 173 KDNKDKSLSKAELAQIKEYDVRKSHSFQFQVSSLKLNKPHSNDGTTKATTTRDLYQYDGY 232
 Db 109 RDELEKRGSSSELTESRKGQ----SRV-----SYTNFT----YVRSY 146

Qy 233 YLVNDGNYLTVKTDLBNLGPVGPFYNGTTAKELPTDAVKYKGHWDFTDVAKQMR 292
 Db 147 VYLNQKN-IDIK-KNIVLPSFDPGVLYYKGRPEKSPKELPS-EKITYKGTVWYVTD-AMEKQR 202

Qy 293 FSEVKENLQGGRYYGASSIDBYNRLLTDEKKNKPERYNG-EYGHISSEFPTVNFKDQKLTG 350
 Db 203 F-EGLGSAAAGDKSGALSALEGVL---RNQAAASSGGTDEGMTSIEFVDFSDKTIKCT 257

Qy 351 LFSN---LQDSRKGNVTKTCKRYDIDANIYCNRFRCSATSDKAFAKSTKHPFTSDAKNSL 407
 Db 258 LYRNRNITQNNSENKQIKTRYTQATHENRFRGKALLADKG-ATNGSHPFISDS-DEL 315

Qy 408 EGGFYGPNAEELAGKPLTNDKLFPGVPGAKRESK----AGEKTEAII DAYA1GTFENKN 461
 Db 3116 EGGFYGPKGKGBELAGKPLSNDKVAVFQAKQDKDGENBAGPATE-VIDAYRI---- 368

Qy 462 NATTFTPKQOLDNFGNAKVLQSLSTVLDLVPVTVKDUNEFTKNKPSSATNKAGETIM 521
 Db 369 ---TGBEFPKEQIDSFGDVKKLUDGVESLSP----SEGNAKAQFQE 409

Qy 522 VNDKYSVKTYGGRNFEEYKLFQGELSVGTNSVFLQGERATTGEKAVPTKGTAKYLGNWV 581
 Db 410 I-BQNGSKATVCCSNLDYMSPGKUSKENKDDMFQLGVRPVS-DVAARTBANAKYRTWY 467

Qy 582 GYI---TGKSSKSFNEAQDVADEFDIDFEKSKVKGKLTQDRODPVENTITGDIANGWNG 638
 Db 468 GYIANGTWSGEASNEQEGNRAEFDVDFSTKKSITLTAKDRTSPAITAMIKDNGFSG 527

Qy 639 KASTKADAGGYKIDSSSTGKSIK-VDAVTGGYGPNAEMGGSFTH----NTDDSK 692
 Db 528 VAKTGB--NGFALDPQNTGNSHYTHIATVSGGYGKNAIEMGGSFSSPGNAPEGKQEK 584

Qy 693 ASVVFGTROPEVK 706
 Db 585 ASVVFETAKRQOLVQ 598

Query Match 22.6%; Score 833.5; DB 3; Length 598;
 Best Local Similarity 34.7%; Pred. No. 1e-48;
 Matches 234; Conservative 98; Mismatches 213; Indels 129; Gaps 28;

Qy 63 GGTNGGTGSAANT----PEPKYDVTDPDKKDEVSIGIQPAMGYGMAISKMLH---- 112
 Db 24 GGGSPFDLDSVBTQDMHSKSKYEDKEKSQPESSQDVSSENCSAACGFAVKLPRRVAHENPKY 83
 Qy 113 KQDPLPLBDEBDIITLJGKQVAKGERKSPLPFSLOVENKLLDGYIAKMNBDKNAIGDRK 172
 Db 84 KEKHPPLGND----WKLQRGF--PNSF-----E 108

Qy 173 KDNKDKSLSKAELAQIKEYDVRKSHSFQFQVSSLKLNKPHSNDGTTKATTTRDLYQYDGY 232
 Db 203 RDELEKRGSSSELTESRKGQ----SRV-----GYTNFT----YVRSY 146

Qy 233 YLVNDGNYLTVKTDLBNLGPVGPFYNGTTAKELPTDAVKYKGHWDFTDVAKQMR 292
 Db 24 GGGSPFDLDSVBTQDMHSKSKYEDKEKSQPESSQDVSSENCSAACGFAVKLPRRVAHENPKY 83
 Qy 351 KQDPLPLBDEBDIITLJGKQVAKGERKSPLPFSLOVENKLLDGYIAKMNBDKNAIGDRK 172
 Db 84 KEKHPPLGND----WKLQRGF--PNSF-----E 108

Qy 233 YLVNDGNYLTVKTDLBNLGPVGPFYNGTTAKELPTDAVKYKGHWDFTDVAKQMR 292
 Db 24 GGGSPFDLDSVBTQDMHSKSKYEDKEKSQPESSQDVSSENCSAACGFAVKLPRRVAHENPKY 83
 Qy 351 KDNKDKSLSKAELAQIKEYDVRKSHSFQFQVSSLKLNKPHSNDGTTKATTTRDLYQYDGY 232
 Db 258 LYRNRNITQNNSENKQIKTRYTQATHENRFRGKALLADKG-ATNGSHPFISDS-DSL 315

Qy 408 EGGFYGPNAEELAGKPLTNDKLFPGVGAKEKRESK----AGEKTEAII DAYA1GTFENKN 461
 Db 316 EGGFYGPKGKGBELAGKPLSNDKVAVFQAKQDKDGENBAGPATE-VIDAYRI---- 368

RESULT 34
 US-08-637-654-97
 Sequence 97, Application US/08637654
 Patent No. 6358727
 GENERAL INFORMATION:
 APPLICANT: Loosmore, Sheena M
 APPLICANT: Harkness, Robin E
 APPLICANT: Schryvers, Anthony B

APPLICANT: Chong, Pele
 APPLICANT: Gray-Owen, Scott
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Murdin, Andrew D
 APPLICANT: Klein, Michel H
 TITLE OF INVENTION: HABEMOPHILUS TRANSFERRIN RECEPTOR GENES
 NUMBER OF SEQUENCES: 147
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Sim & McBurney
 STREET: 6th Floor, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: M5G 1R7
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentin Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/637,654
 FILING DATE: 05-AUG-1996
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: PCT/CA94/00616
 FILING DATE:
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24,973
 REFERENCE/DOCKET NUMBER: 1038-595
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 97:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 598 amino acids
 STRANDEDNESS: single
 TYPE: amino acid
 TOPOLOGY: linear
 US-08-637-654-97

Query Match 22.6%; Score 833.5; DB 3; Length 598;
 Best Local Similarity 34.7%; Pred. No. 1e-48;
 Matches 234; Conservative 98; Mismatches 213; Indels 129; Gaps 28;

Qy 63 GGTNGGTGSAANT----PEPKYDVTDPDKKDEVSIGIQPAMGYGMAISKMLH---- 112
 Db 24 GGGSPFDLDSVBTQDMHSKSKYEDKEKSQPESSQDVSSENCSAACGFAVKLPRRVAHENPKY 83
 Qy 113 KQDPLPLBDEBDIITLJGKQVAKGERKSPLPFSLOVENKLLDGYIAKMNBDKNAIGDRK 172
 Db 84 KEKHPPLGND----WKLQRGF--PNSF-----E 108

Qy 173 KDNKDKSLSKAELAQIKEYDVRKSHSFQFQVSSLKLNKPHSNDGTTKATTTRDLYQYDGY 232
 Db 258 LYRNRNITQNNSENKQIKTRYTQATHENRFRGKALLADKG-ATNGSHPFISDS-DSL 315

Qy 408 EGGFYGPNAEELAGKPLTNDKLFPGVGAKEKRESK----AGEKTEAII DAYA1GTFENKN 461
 Db 316 EGGFYGPKGKGBELAGKPLSNDKVAVFQAKQDKDGENBAGPATE-VIDAYRI---- 368

Qy 462 NATTFPTPKKQKLDNGNAAKVLVGLGSTVIDLVPYTKDYNENFTKNAKPDSATNKAQBTLM 521 ; LENGTH: 598 amino acids
 Db 369 ---TGEFFKEQIDSFSDVKKLVDGVBLSLIP-----; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 US-08-649-518-97

Qy 522 VNDKVSRYTYGRNFFYTLKRGELSVTGSNSVFLQGERATTGEKAQVPTKTKTAKYLGWV 581 ;
 Db 410 I-EQNGYKATVCCSNLDYMSFGKLSKENKDDMFLQGYTRPYS-DVARTEANAKTRGTWY 467 ;
 Qy 582 GYI---TGKDSKSFNEAQDVADEFIDFEKSVKGKLTTKDQDPVNTGDIAGNGWTG 638 ;
 Db 468 GYIANGTWSGEASNQGGRNAEFDYDFTSKKISGTLTAKDRTSPAFITAMIKONGFSG 527 ;
 Qy 639 KASTTKADAGGYKIDSSTTGSIIVIK-DAEVTGGFVGPNAEMGGSPFH---NTDDSK 692 ;
 Db 528 VAKTGE---NGFALDPQNTGNSHYTHEATVSGGFVTKNA1EMGGSFSFPGNAAPEGKQEK 584 ;
 Qy 693 ASVVFGTTRQEEVK 706 ;
 Db 585 ASVVFGAKRQQLVQ 598 ;

RESULT 35
 US-08-649-518-97
 Sequence 97, Application US/08649518
 Patent No. 631779
 GENERAL INFORMATION:
 APPLICANT: Loosmore, Sheena
 APPLICANT: Harkness, Robbin
 APPLICANT: Schryvers, Anthony
 APPLICANT: Chong, Pele
 APPLICANT: Gray-Owen, Scott
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Murdin, Andrew
 APPLICANT: Klein, Michel
 TITLE OF INVENTION: Transferrin Receptor Genes
 NUMBER OF SEQUENCES: 160
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Sim & McBurney
 STREET: 6th Floor, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: M5G 1R7
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent In Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US 08/649,518
 FILING DATE: 17-MAY-1996
 CLASSIFICATION: 536
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/337,483
 FILING DATE: 08-NOV-1994
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/483,577
 FILING DATE: 07-JUN-1995
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/175,116
 FILING DATE: 29-DEC-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/148,968
 FILING DATE: 08-NOV-1993
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24,973
 REFERENCE/DOCKET NUMBER: 1038-608
 TELECOMMUNICATION INFORMATION:
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 97:
 SEQUENCE CHARACTERISTICS:

Qy ; LENGTH: 598 amino acids
 Db ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 US-08-649-518-97

Query Match 22.6%; Score 833.5; DB 3; Length 598;
 Best Local Similarity 34.7%; Pred. No. 1e-48;
 Matches 234; Conservative 98; Mismatches 213; Indels 129; Gaps 28;

Qy 63 GGTNSGTGSANT----PEPKYKDYPTDENKKDVEVSGIQEPAMGYGMALESKRNLLH---- 112 ;
 Db 24 GGGSFPLDS-ETVQDMHSKPKYEDKQSPNSQDQDSENSGAAYGPAVKLPRRNAHNPKY 83 ;
 Qy 113 KQQDTPLEKDIITLDGKQVAKGKSPPLPSLSDVENKLDDYIAKMEADKNAIGDRK 172 ;
 Db 84 KEKHPKLGSMD----WKLQORGE-PNSFS----- 108 ;
 Qy 173 KDNKDKSLSKABLAQKIDEVRSHEFQQLVSSLKNNK1FHSNDGTTKATRDLQVYDGY 232 ;
 Db 109 RDELEJKRGSSSLLBSKWEDQ----SRVY----- 109 ;
 Qy 233 YLNVDGNYLTYKTDDELWNLGPVGGFYNGTITAKELPLTQDAVKGHWDFMTDVAKQRNR 292 ;
 Db 147 VYLNKNN-ID:K-NNVLFGDGYLYKGKEPS-EKITYGTDVTD-AMEKQR 202 ;
 Qy 293 FSEVKENLQAGRYGASSKSKDYNRLLTDEKPKPERYNG- EYGHSSBFTYNFKDKKLGE 350 ;
 Db 203 F-EGLGSAAAGDDKSGALSALBEGVU---RNQAEASSGHTDFGMNTSEFEVDFSDKTKITGT 257 ;
 Qy 351 LFSN--LOOSRKGNVTKTRYDIANIYGNFRERSATADKAESKTRKPFSTDARNSL 407 ;
 Db 258 LYRNRRITQNNSENQKIKTRYTICQATHLGNRPFKGKALAADKG-ATNGSHSPFISDS-DSL 315 ;
 Qy 408 EGGFYGPNAEERLAGKFLNDNKLFGVYFGAKRESK----AGEKTEAILDAYALGTGFNKN 461 ;
 Db 316 EGGFGPKGEBLAGKFLSNDNKAQVFGAKQDKDGENAAGPATE-VIDAYR----- 368 ;
 Qy 462 NATTFPTKQKLDHGNNAKLVGSTVDFVPTGVTDVNEFTKNPDSATNKAQGETLM 521 ;
 Db 369 ---TGEFFKEQIDSFGVVKLVLNGVCLSLIP----- 369 ;
 Qy 522 VNDKVSRYTYGRNFFYTLKRGELSVTGSNSVFLQGERATTGEKAQVPTKTKTAKYLGWV 581 ;
 Db 410 I-EQNGYKATVCCSNLDYMSFGKLSKENKDDMFLQGYTRPVS-DVARTBANKAQRGTWY 467 ;
 Qy 582 GYI---TGKDSKSFNEAQDVFIDFEKSVKGKLTTKDRODPVFTNGTDIANGNGWTG 638 ;
 Db 468 GYIANGTWSGEASIOBGGNRAEFDFSTKMSISGTLTAKDRTSAAFTAMIKONGFSG 527 ;
 Qy 639 KASTTKADAGGYKIDSSTTGSIIVIK-DAEVTGGFVGPNAEMGGSPFH---NTDDSK 692 ;
 Db 528 VAKTGE---NGFALDQPTNTNSHYTHEATVSGGYGKNA1EMGGSFSFPGNAPPCKQEK 584 ;
 Qy 693 ASVVFGTROBEVK 706 ;
 Db 585 ASVVFGAKRQQLVQ 598 ;

RESULT 36
 US-07-961-522-4
 Sequence 4, Application US/07961522
 ; GENERAL INFORMATION:
 ; APPLICANT: POTTER, ANDREW A,
 ; APPLICANT: GERMACH, GERALD F,
 ; APPLICANT: WILSON, PHILLIP J,
 ; APPLICANT: ROSSI-CAMPOS, AMALIA,
 ; TITLE OF INVENTION: VACCINES FOR ACTINOBACILLUS
 ; NUMBER OF SEQUENCES: 9
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: ROBERTA L. ROBINS

STREET: 635 BRYANT STREET
 CITY: PALO ALTO
 STATE: CALIFORNIA
 COUNTRY: UNITED STATES OF AMERICA
 ZIP: 94301
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/07/961,522
 FILING DATE: 19910115
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: ROBINS, ROBERTA L.
 REGISTRATION NUMBER: 33,208
 REFERENCE/DOCKET NUMBER: 9000-0015.20
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 617-8999
 TELEX/FAX: (415) 327-3231
 INFORMATION FOR SEQ ID NO: 4:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 593 amino acids
 TYPE: AMINO ACID
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: peptide
 3-07-361-522-4

Query Match 22.6%; Score 832.5; DB 1; Length 593;
 Best Local Similarity 31.1%; Pred. No. 1,2e-48;
 Matches 228; Conservative 101; Mismatches 232; Indels 171; Gaps 24;

3 HIPTTLCVAAISAVILTAACGGSSGSNNPAPTPIPNASGSNTGNTGAGGTDTNTANAGNT 62
 2 HFKNPVALAFTSFVACSGGKGSPFDLVEDVR-PNQ----- 36

63 GGTMNSGTGSANTPPKVDPTDENKKDEVSQIOPPAMGYGMAISKMNLIHQDQTPLDER 122
 37 -----TAKAEKATTSYQDEETKCKTKEELDKLMEPALGY----- 70

123 DIITDGKQKQVAKGKSPLPFLSDVENKULGDTYIARMNEADKNAIGDRIKDNKDKSLSK 182
 71 -----ETQILRRNPKAPTKETGE--KRNERVVELSE 98

183 AELAKQIKIYDVRKSHFQQVY-SSLKRNKIFHSNDGTTKATRDLQYDGYLYVNDGNYL 241
 99 DKITKLYQESVTEIIPHLDENKGKTSNDYHSHDSKRLDRKNDLKYVRSCEY-VYDGSFN 156

242 TVKTD---LWNLGPVGGYFYNGTTAKELPTDQAVKYGHWDMTDVAKQRNPFSEVK 297
 157 EIRNDSGPHVKVKQGIDGVYVLYGVTSPSKELPKGVKVISYKGWTWDFNSNILER---EID 212

298 --ENLQAGRYGYGASSKDEYNRLTDEKPKPERYNGEYG-----HSSEFTVNPKDKKL 347
 213 GFDTSGGDNVSATS-----ITEVNRDVKVGEKLDNBVKGVAHSSFEADDNKKL 265

348 TGELFSNLQDSRKGNVTKRYDIDANIYCNRFQSATASDKAEASKTKHPFTSDAKNSL 407
 266 TGSLYRNGTNRKQAEYTKRYSSTEADIAGNFRG---KAKAEGADPFLFTS-NYL 318

408 EGGFYGPNAEELAGKPLTNDKLFVFGAKRESTAGE-KTEAIIIDAYALGTFNKNNTF 466
 319 EGGFYGPRAEMAGKFPTNKSFLAVEAAKSEN- GETTERIIDATKI-----DL 367

467 TPFKTKQDQFNGNARKLVLGTVLSTIDLVPTGTVKVNFTKPKDPSATKAGETLMVNDVK 526
 368 TQFNAEKLNFQDASVLIIDGQKIDLA-----GVNFKNKSTKVEINGK 410

527 SVKTYGYGRNPEYKFGEL-----SVGTNSNSVPLQGERTATTGKAVPKTKGAKYLGWN 580
 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
 467 DALVSKGTNWIADADNRE--EGYRTEFDVNNSDKRKGKLVFKGGVNPFVFTDATING 5
 634 NGWTGKASTTAKADAGGYKIDS-SSTGKSVIVKDAEVTGCGFYGPNANEMGGSFHTNDDSK 6
 524 NGFJGSAKTSDS--GFALDAGSSQHGNAVFSDIKVNGFYGPTAGEBLGQQFHKSNDNGS 5
 693 ASVVFGTQKQE 704
 581 VGBVFGAKRQIE 592

RESULT 37
 US-08-217-438-4
 ; Sequence 4, Application US/08217438
 ; Patent No. 551072
 ; GENERAL INFORMATION:
 ; APPLICANT: Potter, Andrew A.
 ; APPLICANT: Gerlach, Gerald F.
 ; APPLICANT: Willson, Philip J.
 ; APPLICANT: Rossi-Campos, Amalia A.
 ; TITLE OF INVENTION: ACTINOBACILLUS PLEURODNEIMONIAS
 ; TITLE OF INVENTION: TRANSFERRIN BINDING PROTEINS AND USES THEREOF
 ; NUMBER OF SEQUENCES: 11
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Reed & Robins
 ; STREET: 635 Bryant Street
 ; CITY: Palo Alto
 ; STATE: California
 ; COUNTRY: USA
 ; ZIP: 94301
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent In Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/217,438
 ; FILING DATE: 22-MAR-1994
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Robins, Roberta L.
 ; REGISTRATION NUMBER: 33,208
 ; REFERENCE DOCKET NUMBER: 9001-0015.01
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 415-617-8999
 ; TELEFAX: 415-327-3231
 ; TELEX:
 ; INFORMATION FOR SEQ ID NO: 4:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 593 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; US-08-217-438-4

Query Match 22.6%; Score 832.5; DB 1; Length 593;
 Best Local Similarity 31.1%; Pred. No. 1,2e-48;
 Matches 228; Conservative 101; Mismatches 232; Indels 171; Gaps 228; Conservation 101; Mismatches 232; Indels 171; Gaps 3

3 HIFPLTLCVAISAVILTAACGGSSGSNNPAPTPIPNASGSNTGNTGAGGTDTNTANAGNT 6
 2 HFKNPVALAFTSFVACSGGKGSPFDLVEDVR-PNQ----- 36

63 GGTMNSGTGSANTPPKVDPTDENKKDEVSQIOPPAMGYGMAISKMNLIHQDQTPLDER 122
 37 -----TAKAEKATTSYQDEETKCKTKEELDKLMEPALGY----- 70

123 DIITDGKQKQVAKGKSPLPFLSDVENKULGDTYIARMNEADKNAIGDRIKDNKDKSLSK 182
 71 -----ETQILRRNPKAPTKETGE--KRNERVVELSE 98

183 AELAKQIKIYDVRKSHFQQVY-SSLKRNKIFHSNDGTTKATRDLQYDGYLYVNDGNYL 241
 99 DKITKLYQESVTEIIPHLDENKGKTSNDYHSHDSKRLDRKNDLKYVRSCEY-VYDGSFN 156

242 TVKTD---LWNLGPVGGYFYNGTTAKELPTDQAVKYGHWDMTDVAKQRNPFSEVK 297
 157 EIRNDSGPHVKVKQGIDGVYVLYGVTSPSKELPKGVKVISYKGWTWDFNSNILER---EID 212

298 --ENLQAGRYGYGASSKDEYNRLTDEKPKPERYNGEYG-----HSSEFTVNPKDKKL 347
 213 GFDTSGGDNVSATS-----ITEVNRDVKVGEKLDNBVKGVAHSSFEADDNKKL 265

348 TGELFSNLQDSRKGNVTKRYDIDANIYCNRFQSATASDKAEASKTKHPFTSDAKNSL 407
 266 TGSLYRNGTNRKQAEYTKRYSSTEADIAGNFRG---KAKAEGADPFLFTS-NYL 318

408 EGGFYGPNAEELAGKPLTNDKLFVFGAKRESTAGE-KTEAIIIDAYALGTFNKNNTF 466
 319 EGGFYGPRAEMAGKFPTNKSFLAVEAAKSEN- GETTERIIDATKI-----DL 367

467 TPFKTKQDQFNGNARKLVLGTVLSTIDLVPTGTVKVNFTKPKDPSATKAGETLMVNDVK 526
 368 TQFNAEKLNFQDASVLIIDGQKIDLA-----GVNFKNKSTKVEINGK 410

527 SVKTYGYGRNPEYKFGEL-----SVGTNSNSVPLQGERTATTGKAVPKTKGAKYLGWN 580
 581 VGBVFGAKRQIE 592

QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
 DB 467 DALVSKGTNWIADADNRE--EGYRTEFDVNNSDKRKGKLVFKGGVNPFVFTDATING 5
 634 NGWTGKASTTAKADAGGYKIDS-SSTGKSVIVKDAEVTGCGFYGPNANEMGGSFHTNDDSK 6
 524 NGFJGSAKTSDS--GFALDAGSSQHGNAVFSDIKVNGFYGPTAGEBLGQQFHKSNDNGS 5
 693 ASVVFGTQKQE 704
 DB 581 VGBVFGAKRQIE 592

QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
 DB 467 DALVSKGTNWIADADNRE--EGYRTEFDVNNSDKRKGKLVFKGGVNPFVFTDATING 5
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QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
 DB 467 DALVSKGTNWIADADNRE--EGYRTEFDVNNSDKRKGKLVFKGGVNPFVFTDATING 5
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 524 NGFJGSAKTSDS--GFALDAGSSQHGNAVFSDIKVNGFYGPTAGEBLGQQFHKSNDNGS 5
 693 ASVVFGTQKQE 704
 DB 581 VGBVFGAKRQIE 592

QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
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QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
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QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
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 693 ASVVFGTQKQE 704
 DB 581 VGBVFGAKRQIE 592

QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
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 DB 581 VGBVFGAKRQIE 592

QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
 DB 467 DALVSKGTNWIADADNRE--EGYRTEFDVNNSDKRKGKLVFKGGVNPFVFTDATING 5
 634 NGWTGKASTTAKADAGGYKIDS-SSTGKSVIVKDAEVTGCGFYGPNANEMGGSFHTNDDSK 6
 524 NGFJGSAKTSDS--GFALDAGSSQHGNAVFSDIKVNGFYGPTAGEBLGQQFHKSNDNGS 5
 693 ASVVFGTQKQE 704
 DB 581 VGBVFGAKRQIE 592

QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
 DB 467 DALVSKGTNWIADADNRE--EGYRTEFDVNNSDKRKGKLVFKGGVNPFVFTDATING 5
 634 NGWTGKASTTAKADAGGYKIDS-SSTGKSVIVKDAEVTGCGFYGPNANEMGGSFHTNDDSK 6
 524 NGFJGSAKTSDS--GFALDAGSSQHGNAVFSDIKVNGFYGPTAGEBLGQQFHKSNDNGS 5
 693 ASVVFGTQKQE 704
 DB 581 VGBVFGAKRQIE 592

QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
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 DB 581 VGBVFGAKRQIE 592

QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
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 DB 581 VGBVFGAKRQIE 592

QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
 DB 467 DALVSKGTNWIADADNRE--EGYRTEFDVNNSDKRKGKLVFKGGVNPFVFTDATING 5
 634 NGWTGKASTTAKADAGGYKIDS-SSTGKSVIVKDAEVTGCGFYGPNANEMGGSFHTNDDSK 6
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QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
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 693 ASVVFGTQKQE 704
 DB 581 VGBVFGAKRQIE 592

QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
 DB 467 DALVSKGTNWIADADNRE--EGYRTEFDVNNSDKRKGKLVFKGGVNPFVFTDATING 5
 634 NGWTGKASTTAKADAGGYKIDS-SSTGKSVIVKDAEVTGCGFYGPNANEMGGSFHTNDDSK 6
 524 NGFJGSAKTSDS--GFALDAGSSQHGNAVFSDIKVNGFYGPTAGEBLGQQFHKSNDNGS 5
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 DB 581 VGBVFGAKRQIE 592

QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
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 634 NGWTGKASTTAKADAGGYKIDS-SSTGKSVIVKDAEVTGCGFYGPNANEMGGSFHTNDDSK 6
 524 NGFJGSAKTSDS--GFALDAGSSQHGNAVFSDIKVNGFYGPTAGEBLGQQFHKSNDNGS 5
 693 ASVVFGTQKQE 704
 DB 581 VGBVFGAKRQIE 592

QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
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 634 NGWTGKASTTAKADAGGYKIDS-SSTGKSVIVKDAEVTGCGFYGPNANEMGGSFHTNDDSK 6
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 DB 581 VGBVFGAKRQIE 592

QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
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 634 NGWTGKASTTAKADAGGYKIDS-SSTGKSVIVKDAEVTGCGFYGPNANEMGGSFHTNDDSK 6
 524 NGFJGSAKTSDS--GFALDAGSSQHGNAVFSDIKVNGFYGPTAGEBLGQQFHKSNDNGS 5
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QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
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 634 NGWTGKASTTAKADAGGYKIDS-SSTGKSVIVKDAEVTGCGFYGPNANEMGGSFHTNDDSK 6
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 DB 581 VGBVFGAKRQIE 592

QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
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QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
 DB 467 DALVSKGTNWIADADNRE--EGYRTEFDVNNSDKRKGKLVFKGGVNPFVFTDATING 5
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QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
 DB 467 DALVSKGTNWIADADNRE--EGYRTEFDVNNSDKRKGKLVFKGGVNPFVFTDATING 5
 634 NGWTGKASTTAKADAGGYKIDS-SSTGKSVIVKDAEVTGCGFYGPNANEMGGSFHTNDDSK 6
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QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
 DB 467 DALVSKGTNWIADADNRE--EGYRTEFDVNNSDKRKGKLVFKGGVNPFVFTDATING 5
 634 NGWTGKASTTAKADAGGYKIDS-SSTGKSVIVKDAEVTGCGFYGPNANEMGGSFHTNDDSK 6
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QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
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 634 NGWTGKASTTAKADAGGYKIDS-SSTGKSVIVKDAEVTGCGFYGPNANEMGGSFHTNDDSK 6
 524 NGFJGSAKTSDS--GFALDAGSSQHGNAVFSDIKVNGFYGPTAGEBLGQQFHKSNDNGS 5
 693 ASVVFGTQKQE 704
 DB 581 VGBVFGAKRQIE 592

QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
 DB 467 DALVSKGTNWIADADNRE--EGYRTEFDVNNSDKRKGKLVFKGGVNPFVFTDATING 5
 634 NGWTGKASTTAKADAGGYKIDS-SSTGKSVIVKDAEVTGCGFYGPNANEMGGSFHTNDDSK 6
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 693 ASVVFGTQKQE 704
 DB 581 VGBVFGAKRQIE 592

QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
 DB 467 DALVSKGTNWIADADNRE--EGYRTEFDVNNSDKRKGKLVFKGGVNPFVFTDATING 5
 634 NGWTGKASTTAKADAGGYKIDS-SSTGKSVIVKDAEVTGCGFYGPNANEMGGSFHTNDDSK 6
 524 NGFJGSAKTSDS--GFALDAGSSQHGNAVFSDIKVNGFYGPTAGEBLGQQFHKSNDNGS 5
 693 ASVVFGTQKQE 704
 DB 581 VGBVFGAKRQIE 592

QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
 DB 467 DALVSKGTNWIADADNRE--EGYRTEFDVNNSDKRKGKLVFKGGVNPFVFTDATING 5
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 524 NGFJGSAKTSDS--GFALDAGSSQHGNAVFSDIKVNGFYGPTAGEBLGQQFHKSNDNGS 5
 693 ASVVFGTQKQE 704
 DB 581 VGBVFGAKRQIE 592

QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
 DB 467 DALVSKGTNWIADADNRE--EGYRTEFDVNNSDKRKGKLVFKGGVNPFVFTDATING 5
 634 NGWTGKASTTAKADAGGYKIDS-SSTGKSVIVKDAEVTGCGFYGPNANEMGGSFHTNDDSK 6
 524 NGFJGSAKTSDS--GFALDAGSSQHGNAVFSDIKVNGFYGPTAGEBLGQQFHKSNDNGS 5
 693 ASVVFGTQKQE 704
 DB 581 VGBVFGAKRQIE 592

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 524 NGFJGSAKTSDS--GFALDAGSSQHGNAVFSDIKVNGFYGPTAGEBLGQQFHKSNDNGS 5
 693 ASVVFGTQKQE 704
 DB 581 VGBVFGAKRQIE 592

QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
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 DB 581 VGBVFGAKRQIE 592

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 DB 581 VGBVFGAKRQIE 592

QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
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 DB 581 VGBVFGAKRQIE 592

QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
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QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
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 DB 581 VGBVFGAKRQIE 592

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 693 ASVVFGTQKQE 704
 DB 581 VGBVFGAKRQIE 592

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 DB 581 VGBVFGAKRQIE 592

QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6
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 634 NGWTGKASTTAKADAGGYKIDS-SSTGKSVIVKDAEVTGCGFYGPNANEMGGSFHTNDDSK 6
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 693 ASVVFGTQKQE 704
 DB 581 VGBVFGAKRQIE 592

QY 581 -----VGYITGDKSSKSFNEAQDVADEFDIDEPEKSKYRGKLTTKDRDQDVFNITGDIAG 6

REFERENCE/DOCKET NUMBER: 9001-0015.01
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 415-517-8999
 TELEFAX: 415-327-3231.
 TELEX:
 INFORMATION FOR SEQ ID NO: 5:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 593 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-08-217-438-5

Query 183 AELAKQIKEDVRSKSHFQQVL-SSUKNIKIFHSNDGTTKATTRDLOVYDGYYLVNDGNTI 241
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 157 EIRNDSGGFHVFKGIDGTVYLGVTSPSEBLPKGKVISTKGTWDFVSNLNER---EID 212
 298 --ENIQAQGRYGAQSKDEYNRLLTDEKPKERTYNGEYG-----HSEBF7YNFKDCKL 347
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 Query 348 TGFELPSNLQDSRKGNNVTKTCKRYDDIANIYGNRFRGSATASDKAASKTKHPPFTSDAKNSL 407
 266 TGSVLYRNGYINRNRAQEVTKRYSSTEADAGNRFRG-----KAKAEKACDPIFTDS-NYL 318
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 Databank 693 ASVVFGTKEQEE 704
 581. VGAVGFAKQIE 592

RESULT 38
 Sequence 5, Application US/082217438
 Patent No. 5521012.

GENERAL INFORMATION:
 APPLICANT: Potter, Andrew A.
 APPLICANT: Gerlach, Gerald F.
 APPLICANT: Willson, Philip J.
 APPLICANT: Rossi-Campos, Analicia
 TITLE OF INVENTION: ACTINOBACILLUS PLEUROPNEUMONIAE
 NUMBER OF SEQUENCES: 11
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Reed & Robins
 STREET: 635 Bryant Street
 CITY: Palo Alto
 STATE: California
 COUNTRY: USA
 ZIP: 94301
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION NUMBER: US/08/217-438
 APPLICATION NUMBER: 94301
 581. VGAVGFAKQIE 592

Query 183 AELAKQIKEDVRSKSHFQQVL-SSUKNIKIFHSNDGTTKATTRDLOVYDGYYLVNDGNTI 241
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 157 EIRNDSGGFHVFKGIDGTVYLGVTSPSEBLPKGKVISTKGTWDFVSNLNER---EID 212
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 Query 348 TGFELPSNLQDSRKGNNVTKTCKRYDDIANIYGNRFRGSATASDKAASKTKHPPFTSDAKNSL 407
 266 TGSVLYRNGYINRNRAQEVTKRYSSTEADAGNRFRG-----KAKAEKACDPIFTDS-NYL 318
 Databank 408 EGGYGPGBNEELAGEFLTNDKLLPGVFKGARERSTAGE-KTEAIDAYAAGTGNKNATTF 466
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 581. VGAVGFAKQIE 592

Patent No. 5708149
 GENERAL INFORMATION:
 APPLICANT: Loosmore, Sheena
 APPLICANT: Harkness, Robin
 APPLICANT: Schryvers, Anthony
 APPLICANT: Chong, Pele
 APPLICANT: Gray-Owen, Scott
 APPLICANT: Murdin, Andrew
 APPLICANT: Yang, Yan-Ping
 APPLICANT: Klein, Michel
 TITLE OF INVENTION: Transferrin Receptor Genes
 NUMBER OF SEQUENCES: 147
 CORRESPONDENCE ADDRESS:
 ADDRESS: Sim & McBurney
 STREET: 6th Floor, 330 University Avenue
 CITY: Toronto
 STATE: Ontario
 COUNTRY: Canada
 ZIP: MSG 1R7
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC Compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US 08/487, 890A
 FILING DATE: 07-JUN-1993
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/175, 116
 FILING DATE: 29-DEC-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/148, 968
 FILING DATE: 08-NOV-1993
 ATTORNEY/AGENT INFORMATION:
 NAME: Stewart, Michael I
 REGISTRATION NUMBER: 24, 973
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (416) 595-1155
 TELEFAX: (416) 595-1163
 INFORMATION FOR SEQ ID NO: 100:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 593 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: Linear
 US-08-487-890A-100

Query 298 --ENLQAGRYGASSKDEYNRLITDEKNKPERYNGEG-----HSSEFTVNFDKK 347
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 Db 266 TGSIYRNGYINRNKAQEVTKRISIEDAFTGFRG-----KAKAEGADP1FTDS-NYL 318
 Query 408 EGFFYGPNAEELAGKFLTNNDKLFVGFGAKRESKAGE-KTEAII DAYLGTFNKNATTF 466
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 Db 581 VGAVFGAKRQIE 592

RESULT 40
 US-08-321-978-4
 ; Sequence 4, Application US/08321978
 ; Patent No. 5801018
 ; GENERAL INFORMATION:
 ; APPLICANT: POTTER, ANDREW A.
 ; APPLICANT: GERMACH, GERALD F.
 ; APPLICANT: WILLSON, PHILIP J.
 ; APPLICANT: ROSSI-CAMPOS, AMALIA
 ; TITLE OF INVENTION: VACCINES FOR ACTINOBACILLUS
 ; TITLE OF INVENTION: PLEURONEUMONIAE
 ; NUMBER OF SEQUENCES: 9
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: ROBERTA L. ROBINS
 ; STREET: 285 HAMILTON AVE, SUITE 200
 ; CITY: PALO ALTO
 ; STATE: CALIFORNIA
 ; COUNTRY: UNITED STATES OF AMERICA
 ; ZIP: 94301
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/321, 978
 ; FILING DATE: 12-OCT-1994
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: ROBINS, ROBERTA L.
 ; REGISTRATION NUMBER: 33, 208
 ; REFERENCE/DOCKET NUMBER: 9001-0015.02
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (415) 327-3400
 ; TELEFAX: (415) 327-3231
 ; INFORMATION FOR SEQ ID NO: 4:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 593 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single

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Query 242 TVKTDB--LWNLGEVGGFYNGTGTAAELPQDAVKKGHWDFMTDVAQRNRFSEYK 297
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TOPOLOGY: linear
 MOLECULE TYPE: peptide
 US-08-321-978-4

Query Match 22.6%; Score 832.5; DB 1; Length 593;
 Best Local Similarity 31.1%; Pred. No. 1.2e-48;
 Matches 228; Conservative 101; Mismatches 232; Indels 171; Gaps 24;

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Qy 123 DIRTLDGKQVAKGERSPLPFSLDVYENKLLGYTARMNEADKNAIGDRIKKDNDKDKSLRK 182
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Qy 242 TVKTD-----LWNLGPGVGPFYNGTTTAKELEPLTODAVKKGHWIDMFTDVAQQRNRFSEVK 297
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 Db 266 TGSILYRNGYINRNKADEVTRYSIDEAIGNRFRG-----KAKAEKAGDPPIFTDS-NYL 318

Qy 408 EGGFYGPNAEPLAGKPLTNDKLFGVFGAKRESKAGE-KTEAIIIDAYAIGCTENKNNATTF 466
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Qy 527 SVKTYGYGRNPFBEYLKEGL-----SVGTSNSVLEQGERTATTGEKAVPTKGATKYLEW 580
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Qy 581 -----VGYITGKDSKSFNEAQDVADFIDDFEKKSVKQLTTFDRODPVNNTGDIAG 633
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Qy 634 NGWTGKASTTIAADAGGYKIDS-SSTCGKSIYVTKDAEVTFGGFYGPNAEMGGSFTHNTDDSK 692
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Qy 693 ASVVFETKROBE 704
 Db 581 VGAVFGAKRQIE 592

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